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Vol. XLVI Number 20

PUBLISHED WEEKLY AT 5 SOUTH WABASH AVENUE CHICAGO, NOVEMBER 13, 1924

Thirty-five Cents a Copy Three Dollars a Year

THE new Jordan Friendly Three is prophetic of what is coming in body styles.

Who built the first Brougham with a Coach seating idea?

Who built the first Four-Door Brougham?

They all watch Jordan.

Edward S. Jordan

ordan Motor Car Company Cleveland, Ohio



Any man is apt TO THINK HIS OWN PRODUCT IS BEST. In fact he will usually admit it without argument, BUT-

An Automobile, or a Portable Electric Drill usually get GOOD REPUTATIONS BECAUSE THE MEN WHO USE THEM FIND THEM SATISFACTORY.

Of course we are safe when we suggest that YOU GET THE OPINIONS OF MEN WHO ARE USING PORTABLE ELECTRIC DRILLS.

BECAUSE WE TRIED IT FIRST OURSELVES and 92% of the men we asked said they preferred-

"With the Pistol Grip and Trigger Switch"

Your own jobber can supply them.

THE BLACK & DECKER MFG. CO.

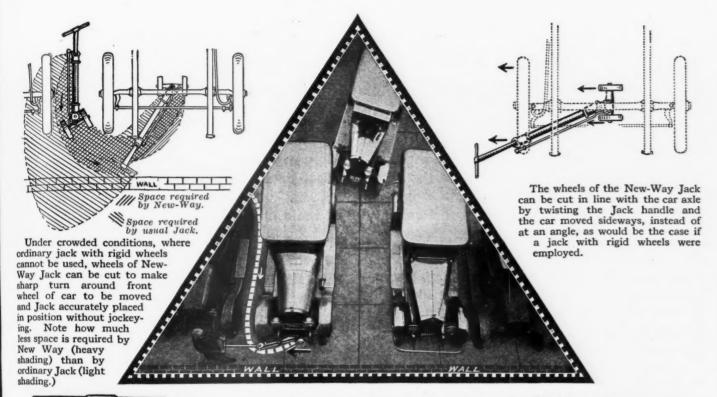
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BRANCH OFFICES AND SERVICE STATIONS

NEW YORK CHICAGO

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Easy to operate in tight places because the wheels pivot

T'S an easy matter to get a car out of a tight place in your garage or repair shop in a hurry if you have a Weaver Model "B" New-Way Jack. By turning the handle you can cut the wheels (an exclusive feature) and guide the Jack quickly and accurately in position under the car, under crowded conditions which prevent the use of the ordinary jack with rigid wheels. And, by cutting the wheels of the New-Way in line with the car axle, you can pull the car directly sideways. The above illustrations tell the story.

This is only one of the many exclusive features that make this the most efficient all around garage Jack on the market. Ask your jobber for literature describing the New-Way Jack in detail and the complete Weaver line of garage equipment.

WEAVER MFG. CO. Springfield, Illinois, U. S. A. er Canadian Co. Ltd., Chatham, Ontarlo

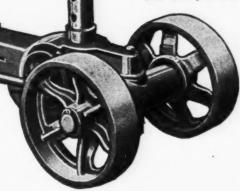
Note these features

Ample leverage to raise burdens up to 5,000 lbs. with ease.
Long body of Jack makes it easy to reach rear axle in spite of tires, overhanging bodies, etc.

Telescoping standard provides range of lift from 8 to 171/2 in.

Load easily lowered by draw-ing up latch under handle. Handle always kept elevated, off floor and out of the way. Heavy roller bearings carry load and facilitate operation.





This Is Our Platform



NO PISTON RING ever has grown to popularity and volume sale as rapidly as the Perfect Circle Oil-Regulating ring. Both in jobber sales and original equipment the Perfect Circle Oil-Regulating ring is the sensation of the industry today.

Naturally such success would attract imitators. Some manufacturers scoffed at the Perfect Circle ring when it was introduced. They have lived to see it out-distance other so-called oil rings, and also to come into almost general use as standard equipment.

Already some imitators have appeared. Their chief purpose seems to be to produce a ring that LOOKS LIKE the Perfect Circle. Of course, they cannot duplicate the Perfect Circle ring without infringing Perfect Circle patents.

The continuous oil-groove reservoir in combination with oil-draining slots is an exclusive PERFECT CIRCLE feature and is not, and cannot be used by anyone else.

These imitation rings have been entered in competition with Perfect Circles in tests made by car manufacturers. NOT ONE OF THEM EVER HAS BEEN ADOPTED AS STANDARD EQUIPMENT—while Perfect Circle Oil-Regulating rings are now standard equipment in more than 70 cars and trucks, including such leaders as Packard, Cadillac, Pierce-Arrow, Hupmobile, Willys-Knight, Nash, Continental Motors, etc.

Performance alone won this standard equipment business for the Perfect Circle Oil-

Regulating ring. It takes something besides LOOKS to win the approval of the leading automobile engineers and the best repairmen of the country.

Our ambition is to continue to be known as the BEST oil-ring, the one that REALLY WORKS, the PERFORMER that has no come-back on the garageman or the car manufacturer. We have that reputation now, and we mean to keep and protect it.

There have been many imitators of Gillette Safety Razors, Hoover Vacuum Cleaners and other recognized quality products, but they continue as the big sellers, and the big profit makers for the trade.

We will not jeopardize our reputation by cheap methods of manufacture. In fact we will continue to spend more and more money to make Perfect Circles better and better. Many of our methods are our own, exclusively, worked out by our engineers. Car manufacturers tell us we are far ahead in our methods and the results we get.

In addition, we will continue our aggressive advertising activities, to make Perfect Circles not only the BEST but also the BEST KNOWN oil-rings.

Our policy is designed to build a large volume and permanent business for our jobbers, our dealers, and ourselves.

This is our PLATFORM. We believe you'll agree it is a real one.

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INDIANA PISTON RING COMPANY, HAGERSTOWN, INDIANA, U. S. A.

Manufacturers of

PERFECT CIRCLE Oil-Regulating Piston Rings

No. 20

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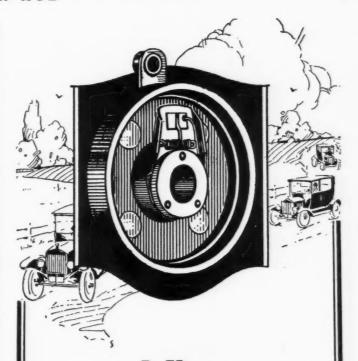
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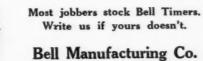


Is Your Timer Stock Hard to Move?

Best profits naturally come from rapid turnover. And many dealers have found turnover and profits on Bell Timers so satisfactory that they are concentrating on this line alone. Bell profits are permanent, too. There are no kicks or comebacks.

"Built like a High-grade Distributor"

is one piece of molded Bakelite, with copper contacts molded in. Copper brush wipes around highly machined raceway. Smooth contact at all speeds. And no oiling needed.



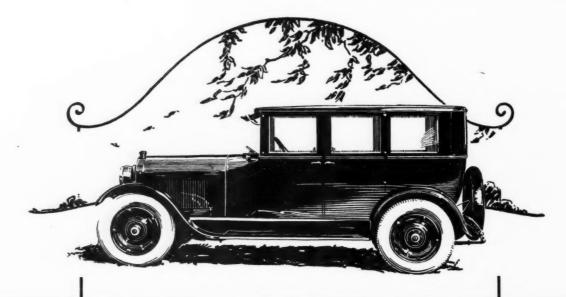
13 Elkins St. Boston 27, Mass.

> Ask also about the ingenious

> > **BELL DASH** LAMP

for Fords and other cars.





Do You Have to Depend on Transient Trade?

WHERE will your business come from next year? The year after? Five years from now?

Can you count on repeat orders from your former customers, or will you have to depend almost entirely on transient trade?

One of the greatest assets of Westcott dealers is an established clientele—a host of satisfied customers who would no more think of changing to another make of car than they would think of changing their habits of a lifetime.

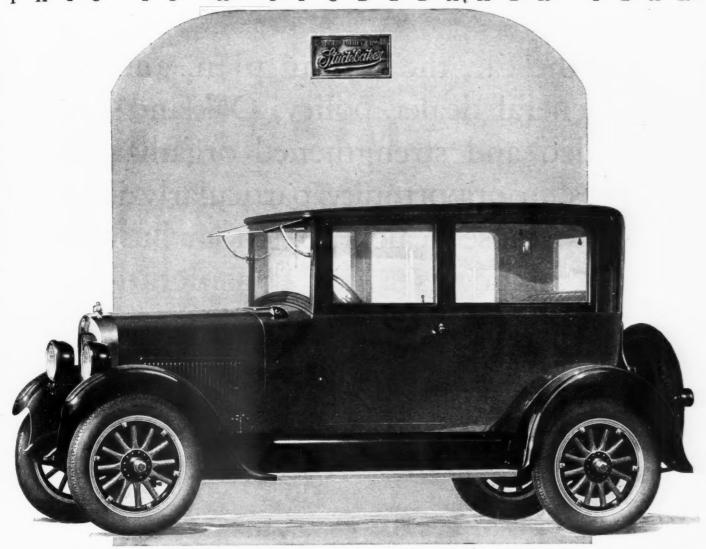
If you would like to become the representative of a car of this character, a car that will build up for you a steady repeat-order business in the years to come, send for details of the Westcott Dealer Franchise.

Presiden

The Westcott Motor Car Co. Springfield, Ohio



THIS IS A STUDEBAKER YEAR



The New Studebaker Standard Six Five-Passenger Coupe

THIS beautiful five-passenger Coupe in soft lacquer finish is as original and distinctive in style as any fine custom built closed car can be. Like every Studebaker closed car, it is built complete by Studebaker, body and chassis—exclusively for the Studebaker trade.

A Studebaker-built body can be obtained only on a Studebaker-built chassis.

The sheer appeal of obvious quality, perfect riding qualities and truly remarkable performance makes the new Standard Six fivepassenger Coupe almost instantly the choice of discriminating customers who appreciate individuality and fineness—and at moderate price.

The universal success of Studebaker dealers is the result of able men handling fine merchandise, properly priced and completely covering the demand of a broad market.

There's a Studebaker car to meet every demand in the three big markets.

'1HE STUDEBAKER CORPORATION OF AMERICA · South Bend, Indiana

STANDARD SIX	SPECIAL SIX BIG SIX	
113 in. W.B. 50 H.P.	120 in. W.B. 65 H.P. 127 in. W.B. 75 H.I	
5-Pass. Duplex-Phaeton . \$1145 -Pass. Duplex-Roadster . 1125 -Pass. Coupe-Roadster . 1395 -Pass. Coupe . 1495 -Pass. Sedan . 1595 -Pass. Berline . 1650	5-Pass. Duplex-Phaeton . \$1495 3-Pass. Duplex-Roadster . 1450 4-Pass. Victoria 2050 5-Pass. Sedan 2150 5-Pass. Berline	7-Pass. Duplex-Phaeton . \$187: 5-Pass. Coupe 2650 7-Pass. Sedan

STUDEBAKER

In the car, the selling plan, and the general dealer policy, Oakland's expanded and strengthened organization offers an opportunity particularly inviting to those dealers to whom business permanency is a first consideration—

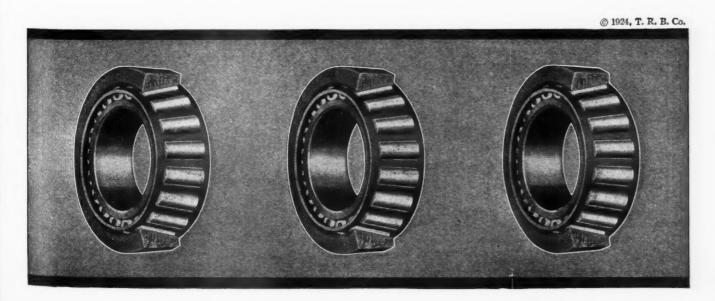
Oakland Motor Car Company, Pontiac, Michigan

O A K L A N D D OF GENERAL MOTORS

In 58 of 58 motor coaches exhibited at the Atlantic City Electric Railway Show-

TIMKEN Tapered ROLLER BEARINGS

The exhibitors used an average of 18 Timken Bearings to the vehicle, ranging from one to thirty.





Reo will represent sweeping dominance in closed car value during 1925

The World's Most Complete Line of Motor Vehicles

PASSENGER CARS
Five Models
SPEED WAGON
12 Standard Bodies
PARCEL DELIVERY
1500-lb. Capacity
TAXICAB
6-Cylinder Engine
PAY-ENTER BUS
For City Operation
SEDAN BUS
For Highway Travel

Applications for the Reo Sales Franchise Will Be Considered from Established Dealers. Significant,—is the 20thAnniversary Reo Sedan, which at 1595 is the World's lowest priced quality closed car!



REO MOTOR CAR COMPANY

Lansing-Michigan

MOTOR AGE

Vol. XLVI

Chicago, November 13, 1924

No. 20

Take Discounts to Reap Profits

Prompt Payment of Bills for Merchandise Purchases Not Only Increases

Dealer's Financial Standing But Adds to His Net Earnings

By SAM SHELTON

Economics of Purchasing-No. 4

A FERTILE source of profit in any business is to be found in the prompt payment of bills for merchandise bought. There are just two ways of selling or buying merchandise and these are cash or credit. Some merchants buy for cash and sell for cash. Others buy for cash and sell on credit, but rarely is found a merchant who sells for cash buying on credit except for that nominal extension of the time of payment which is based purely upon convenience.

Nevertheless the greatest proportion of the world's business is done on credit and the automotive business is no exception. The dealer

in automobiles must in the great majority of cases pay for the vehicles he buys when he unloads them, but methods have been evolved whereby he may borrow the greater part of the money required to pay the bill. In turn the dealer sells the vehicle to a customer who pays part cash and for the balance gives his note, upon which the cash is advanced to the dealer by an independent agency. The dealer then is able to take up the short time obligations upon which he has borrowed the money to pay the manufacturer.

Thus at the very foundation of the business where cash payment is supposed to be the rule we have a very elaborate credit structure operating independently and under-writing these supposedly cash transactions. The

system necessarily adds an overhead charge to the business. A certain percentage of the dealer's prospective profit on a car goes to pay interest on the money advanced to him to pay the manufacturer or distributor from whom he bought it. The customer who buys from the dealer

pays interest on his deferred payments and in addition pays certain charges connected with the incidental costs of the accommodation. The customer who buys a car on time finds that when he gets through paying for it it has cost him substantially more than if he had paid cash.

Buy on Credit

And yet probably 75 to 80 per cent of all car buyers avail themselves of the credit system and pay the additional cost without complaint. They find that it enables them to enjoy the benefits of the automobile while earning

the money to pay for it, or in some cases while using the money represented by the deferred payments more profitable in a business way.

It is not surprising, then, that the automotive merchant as well as the merchant in other lines buys most of his merchandise on credit. But there is a vital distinction in the degrees of credit and therein lies the making or breaking of many a merchant.

The automotive merchant who is considered a fairly good credit risk is able to buy his merchandise, except cars, on open account for which he is billed with invoice, or at the end of the month, on terms that customarily allow a discount for payment in 10 days, but require the full amount thereafter, the total sum to be paid within 30 days or other definite time. Sometimes on

seasonable merchandise, in order to keep the goods moving from the manufacturer to the channels of distribution, the billing is extended for a period of 90 days or longer within which the discount may be taken, the net amount to mature at some subsequent date.

ON MAKING PROFITS

THIS is the ninth article in the MOTOR AGE series on profits in the automotive business. This series was started in the Sept. 18 issue of MOTOR AGE and an interesting article has been published each week since. The first five articles were on the general topic of Profits versus Production, and the titles and dates were as follows:

Profit the Motive of All Business—Sept. 18. A New Business but Old Principles—Sept. 25. Where Profits Come From—Oct. 2. How to Determine Markup for Profit—Oct. 9. Meeting Competition that Cuts the Percentage—Oct. 16.

The next group of articles, of which this is the fourth, is on the general topic of the economics of purchasing. The titles and dates of preceding articles follow:

Profit Starts with Buying—Oct. 23. A Well Selected Stock—Oct. 30. Buying from Reliable Sources—Nov. 6.

The final article of this group will be on the subject, "Know the Merchandise You Buy and Sell." The general topic for the next group of five articles will be "Utilization of Plant Capacity."

24 PER CENT A YEAR-

IS a high rate of interest, and yet

advantage of discounts offered for

prompt payment of bills pay this

much or more for a portion of their

This article lays down in plain

language another fundamental prin-

ciple which is one of the secrets of making a profit in the automotive

business. Every MOTOR AGE sub-

scriber should read this and other

articles in the profits series.

working capital.

many merchants who fail to take

It is not the purpose of this article, however, to deal with the details of the various methods of billing merchandise to the dealers who retail it to the consumer. The object is rather to show how by prompt payment of bills and taking advantage of discounts allowed the merchant may increase his profits and improve his position with respect to his competitors.

Interest Rate Is High

One who buys merchandise on credit, agreeing to pay for it at a later date, borrows money just as surely as if he had gone to the bank and given his note. Naturally he must expect to pay interest on that money and it often follows that the interest he pays through the credit arrangement is considerably higher than he would have had to pay at a bank provided the bank would have financed him to the same extent.

The dealer who buys goods on open account and pays for them within 10 days, or the discount period, virtually buys for cash. The 10 days or whatever period is allowed may be considered an extension of time for the convenience of the customer rather than a formal extension of credit.

Let us suppose the discount allowed for cash in 10 days

is two per cent. The manufacturer or wholesaler who quotes merchandise to the dealer on that basis figures on lending the money represented by the price of the goods to the merchant for that period virtually free of charge, but the fact that he expects the full quoted price without any discount if not paid within the alloted period shows that he must exact interest for the working capital that he provides for the retailer beyond that period.

Let us suppose that year in and year out a dealer buys \$1,000 worth of merchandise a month from a particular wholesale. This means he turns over his stock in that particular

line 12times a year. He buys on terms of two per cent discount in 10 days, net 30 days. But he never pays his bills in the 10-day period and therefore loses the discounts. The result is that the \$20 a month he might have saved by taking his discounts goes to pay interest on the working capital he is in effect borrowing from the wholesaler.

Working Capital Required

This interest payment amounts to \$240 a year and the working capital involved in this transaction is only \$1,000. Interest, therefore, is at the rate of 24 per cent a year—surely a high price to pay for a brief extension of credit, and certainly an amount that vitally affects the ability of the retailer to compete with others in his own line.

There are dealers who sometimes are offended when not permitted to take advantage of discounts after expiration of the stated period or when required to pay a fixed rate of interest on accounts not paid within the time of net maturity. Such dealers probably do not realize the extent to which their working capital is being supplied by those from whom they purchase goods. As retailers they require

a certain amount of working capital in order to carry an adequate stock of goods. If they had this working capital in cash they would buy the goods and pay cash in order to obtain the most advantageous terms, sell them, buy more, and thus continue the process.

But being short of working capital the merchant buys his goods and then lets the bill run over a period of a month or more while he is selling and collecting for them in order to pay the bill. This merchant buys again on credit and again lets his bill run, and loses his discount, until he has sold and collected for enough to pay up.

Any merchant who does business this way will realize, if he stops to think for a moment, that actual working capital is being advanced to him by the wholesaler just as surely as if it were so much cash. Realizing this, he cannot blame the wholesaler for insisting upon interest on his money nor for requiring what amounts to a considerably higher rate than might be given at a bank, for the methods involved make the risks greater.

Credit Used to Expand Business

This is not to say that it is an unwise thing for the merchant to buy on credit and in some cases delay payment for the maximum period. There are times when

such credit can profitably be used to expand a business that must necessarily be started on limited capital. But the merchant who makes use of such credit should expect to pay for the accommodation. And if he is the right kind of merchant he will soon build up from his profits a working capital that will make it possible for him to take advantage of all discounts and thus increase his profits.

Many merchants, and they are to be found in the automotive business, make the mistake of starting in business with practically no capital except that which is obtained by the purchase of merchandise on credit. And the wholesalers or manufacturers who

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provide the capital in the form of merchandise are equally in error. Such a business is without resources from the beginning except for the merchandise on its shelves and floors and only as it sells and collects for goods is it able to pay operating expenses. Soon the time comes to pay merchandise bills and funds are not available.

There cannot be laid down any hard and fast rule as to how much capital a dealer should have to start in business. We can, however, lay down as a fundamental principle of merchandising that the merchant who is not in a position to take advantage of discounts is not on equal footing with his competitors and is not making the profits that he should make.

The merchant who takes all discounts, and who collects his own bills promptly, has a decided advantage in the race for business profits.

(The next article in the series on "Profit in the Automotive Business" will be on the subject, "Know the Merchandise You Buy and Sell." It will be the final article on the general topic of the economics of purchasing. Articles on other vital phases of the business are to follow.)

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Alleged Financing Frauds by Dealer Being Prosecuted

Federal Indictments Against Kansas Man Said to Be First Step in Campaign Against Dishonest Practices

Kansas City, Nov. 10.

THE indictment of Frank E. Mouse, formerly Studebaker dealer at Emporia, Kan., by the Federal Grand Jury sitting at Leavenworth, Kan., in October, is said to be the opening step of a program of prosecutions of dealers who are accused of manipulating paper.

Mr. Mouse was the subject of 11 indictments, charging consiracy executed through the United States mails against the Industrial Finance Corporation of South Bend, Ind. His wife is included in each of the 11 indictments; but a different purchaser of a car is mentioned in each, as completing the conspiracy. Nearly all of the purchasers so indicted had been employes of Mr. Mouse, or were employes at the time of the alleged illegal transaction.

It is said that in many cases, scattered over the country, financing corporations and investment companies have discovered improper transactions by dealers in connection with purchasers' notes, or alleged purchasers' notes, discounted to them. In some instances, dealers have forged names of supposed purchasers to notes, in others there has been collusion between a confederate, signing the note, and the dealer. In some cases there have been actual cars described in the notes, though the cars did not go into the possession of the persons who were signatories to the notes. In other cases the serial numbers and the motor numbers mentioned in notes, were fictitious. Sometimes these fictitious numbers varied only slightly from numbers of cars actually delivered to the dealer by his manufacturer, and a casual glance at the numbers might deceive one checking the notes against deliveries.

Few dealers have "got by" with such fraudulent transactions very long. But in the past, the investment companies have usually been content to secure a settlement from the offending dealer, and then have withdrawn their service. Such dealer has usually made new financing connections; and cases are said to be known in which dealers have defrauded two, three and even four investment concerns in succession.

Various Schemes to Defraud

A dealer who attempts to defraud a financing company, usually is of the type who will try to defraud his own bankers, or others. And cases are said to be known, where dealers have mortgaged cars to bankers when they did not own the cars mortgaged, or did not have the

cars in their possession. There are cases in which dealers have mortgaged cars to which title was still in the company that financed their purchase from the manufacturer. Dealers have also sold cars out of trust, to the public; new cars on which they still owed money to financing companies, and on which sales they made no report.

These and other fraudulent practices have been watched, checked, combatted by financing corporations and automobile credit concerns, sometimes by legal proceedings, sometimes by negotiations, but seldom by criminal prosecution.

Prosecution to Follow

Hereafter, it is declared, criminal proceedings will be brought against dealers who are found to have been making false notes and securing their discount by financing companies. Also, check will be kept on the numbers of cars involved in such purchasers' notes endorsed by dealers and offered for discount. This check, it is said, will have to be universal. It will serve the purpose in addition to detecting fraud, of helping the responsible dealer to maintain accurate records of cars the sale of which are financed by purchasers' notes discounted to financing companies.

The Industrial Financing Corporation of South Bend, Ind., has taken the initiative in the new program of prosecution of dealers charged with improper practices. Irregularities were said to have been discovered in the purchasers' notes discounted to this corporation by Mr. Mouse. R. L. Ledterman, manager of the Automobile Trade Credit Bureau of Kansas City, who has handled automobile credits, including practically all motor car dealer

failures, in this territory, for about 10 years, was commissioned to gather evidence, and assist in the prosecution. In view of the fact that purchasers' notes transmitted for discount are transmitted through the mails, any fraud in connection with such transaction would involve the use of the mails for accomplishment; and would become a Federal case. The evidence gathered was submitted to a Federal grand jury sitting at Leavenworth, Kan., in October, which returned indictments against Mr. Mouse and others on the 15th.

In addition to the Federal Indictments, other legal proceedings have been instituted against Mr. Mouse and others, or are in preparation. It is alleged that Mr. Mouse sold several cars out of trust, cars owned by the corporation which had financed their purchase from the manu facturer. Attachment has been brought on property believed to be owned by Mr. Mouse, but no suits have been filed in any effort to recover such cars as are assumed to be in the hands of bona fide purchasers. Suits may also be brought against persons whose names are on notes held by security companies.

A state charge has also been filed against Mr. Mouse, alleging that he secured money from his local bank on mortgage mentioning cars that he did not

Another complication in this and similar cases, is the appearance of apparently duplicated notes on cars, or two notes from one purchaser, both notes being discounted and outstanding, but apparently only one motor car being in existence for security.

The trials under the Federal indictments may be held in December.

New Garage Accounting System

A bookkeeping-accounting system designed especially for the needs of garages and the automobile accessory trade, known as Standard Business Record No. 5, has been recently devised by The Business Methods Corp., Springfield, Mass. There has been inaugurated in connection with it a bookkeeping-accounting service, the aim of which is to provide assistance by means of a concise and adequate bookkeeping system, together with coopera-

tion with users, which consist of helping them to keep accurate business records.

The bookkeeping system embodies the following features: (a) Monthly profit and loss (by departments if desired); (b) Financial statements, by means of which it is possible to render a statement of assets and liabilities, as required by banks, etc.; (c) Income tax return figures.

The Standard Business Record is pub-

lished in various styles ranging from simple single-entry bookkeeping to complete double-entry accounting and consists of patented loose-leaf forms. The system is designed to make immediately available at the end of the year data for the compilation of income tax returns,

After the first year the service is free. The price of the bookkeeping system without the service is \$30; the price of the complete service for one year is \$50.

Proper Bearing Work Means Having the Right Equipment

Hand Scraping No Indication of a Good Job. It is Highly Essential That All Journals Be in Proper Alignment After They Have Been Reconditioned or Replaced

By B. M. IKERT

(This is the seventh of a series of articles on the profitable use of shop equipment.)

THE fitting of main and connecting rod bearings is a job which requires a great deal of skill and even when done by the most painstaking mechanic is largely a matter of guesswork, unless the mechanic has the proper equipment at hand. Hand scraping of bearings, no matter how carefully done does not mean a perfect job by any means, because by this process each bearing and cap is scraped in separately and in the case of engines lubricated by high oil pressures it is practically impossible to obtain the proper clearance with any assurance of accuracy or uniformity.

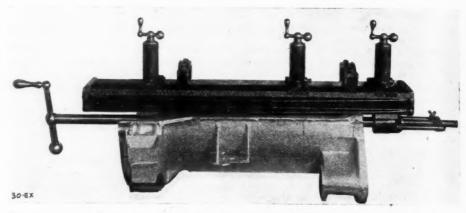
If the crankshaft happens to be very long it is likely to sag somewhat due to its own weight, so that after all the bearings have been scraped in, a good blue or lamp black impression may be obtained and yet the middle bearings may be out of line with the end bearings.

And there is another very important point that must be considered in doing crankshaft bearing work. When engines leave the factory in which they are built the crankshaft is parallel with the cam shaft and the two shafts are spaced the right distance apart to insure that the timing gears, if the front end drive is by gears, mesh properly. Also it must be remembered that in a unit power plant the clutch shaft and transmission shaft become a part of the crankshaft and are in line with the crankshaft when the engine is new. We are assuring, of course, that the engine is a well built job and everything lines up as it should.

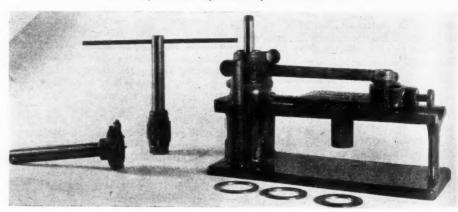
Must Eliminate Guesswork

It will now be readily appreciated that when new bearings are fitted, speaking of main bearings, the correct relationship of the crankshaft, camshaft, clutch shaft, etc., must be maintained the same as it originally was in the engine. A center line drawn through the main bearings when finished must exactly coincide with the original center line of the crankshaft. That is, when the shaft is replaced it must be in exactly the same position as it was when the engine was new.

To maintain the correct relation of the crankshaft and camshaft centers and to insure that every bearing is in line with the others, it obviously becomes a matter of having equipment on hand which will eliminate all guesswork and insure a good job even in the hands of the relatively inexperienced mechanic. We hold



Here is shown a main bearing tool which insures proper alignment of the bearings through the adjustments operated by the hand levers



This shows a form of connecting rod aligner and reamer which insures accuracy in fitting the bearing

no brief against the man who is a good scraper of bearings, but as before mentioned, no matter how skilled he is, when it comes to scraping in a large number of bearings, it is very doubtful if he can even approximate the results of a man working with good equipment.

Two Types of Equipment

The market affords several main bearing tools and as a general thing these machines come under two general heads—align reamers and boring machines. The tool generally used in the latter is called a fly cutter and takes a very light cut. Some shops raise an objection to a reamer for this work, stating that cutting resistance is so high that it is almost impossible to hold the arbor in line as the reamer has a tendency to follow the hole. However, if the fixture supporting the arbor and the arbor it-

self are rugged, these objections probably are greatly minimized.

The fly-cutting outfit has much to recommend it, that is if it has a frame rigid enough to insure against deflection and several bearings to hold the boring bar or arbor to a true line. There is hardly any resistance to the action of a fly cutter and for that reason the makers of such equipment state that perfect alignment at all times is assured.

Fine Feed Desirable

It should, however, have the feed motion through the bearing geared down so as to obtain a very fine feed, thus insuring a smooth finished surface. In one of these machines the fly cutters are set into the boring bar at each of the engine bearings, and all bearings and caps are bored at one time. The setting of the fly cutters to obtain the proper

bore is done by means of a micrometer head mounted in a bracket, clamped temporarily on the shaft directly over the fly cutter to be adjusted. This leaves both hands free to set the cutter. This is done by pushing the fly cutter up until it just touches the stem of the micrometer, and it is then tightened in place by a safety set screw. The cutting edge of the fly cutter should be set exactly to the center line of the micrometer stem, in order to avoid any error due to the advance of cutter. This is taken care of in the design of the micrometer bracket and the boring bar, it being impossible for the workman to place the bracket on the car in any except the correct position.

In this tool, the traverse or feed motion is geared down, the feed screw making only one revolution to every four of the boring bar thus insuring a mirrorlike surface.

The alignment of the finished bearings is assured by the rigid construction of the tool. Two overhead tubular bars ground accurate to the thousandth part of an inch form the backbone of the machine and are high enough out of the way to provide easy access to the boring bar when setting the fly cutters. The boring bar itself is of ground steel 1 7/16 in, in diameter and the method of holding the fly cutters is such that very little is cut out of the cross section of the bar for this purpose, thus insuring a good rigid boring bar, which is also supported in four bearings suspended from the frame of the machine.

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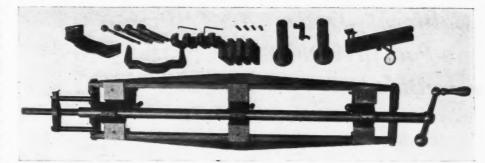
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Extra Equipment for Small Engines

In setting up for boring the proper positioning of the boring bar in relation to the crankcase is accomplished by two disks furnished with the machine. The outside diameters of these disks are turned down to fit accurately in the bore of the crankcase front and rear, with the bearing shells and caps removed. An arbor is furnished as regular equipment for convenience in turning down the disks.

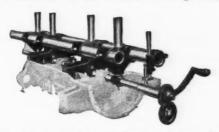
Adjustment to any type or size of crankcase is obtained vertically by raising and lowering the bearings of the tool in the brackets, longitudinally by sliding the brackets endwise on the tubular members, and laterally by slid-



Another form of main bearing tool. In all of these tools it is highly essential that they be rugged enough to support the work

ing the footing pieces sidewise in the brackets.

In this particular outfit an extra equipment is furnished for very small engines. This consists of a 1 in. diameter boring bar with necessary bushings for the bearings of the tool, micrometer bracket to fit the smaller boring bar,



In this main bearing boring fixture the cutting is done by a fly cutter which takes very light cut and thus does not strain the arbor

and an extra pair of disks with arbor.

Facing of the ends of any of the engine bearings can also be done in the same set up, by means of an attachment furnished as regular equipment, with this machine. This insures that the facing will be done square with the bore. Where it is desired to rebabbitt a bearing right in place, this machine also acts as a babbitting fixture.

While the above method is followed in the case of one certain make of bearing tool, it applies in many ways to other equipment of the same character. In the main the tools for bearing reconditioning consist of some sort of framework to support the arbor and in several instances the alignment is secured by "locating" from the camshaft holes. That is, a bar or fitting of some kind is placed

in the camshaft bearing holes and this bar or fitting is parallel with the boring bar. Hence there is assurance that the main bearings when bored or reamed will be substantially parallel with the camshaft bearings.

Connecting Rod Work

Connecting rod bearing work must be done with the same accuracy as main bearing work and to that end it is just as highly essential to have good equipment at hand for doing the work. There is a great variety of connecting rod bearing equipment. Some of these devices are so made that a bearing can be poured and then bored out without disturbing the original position of the rod when it is held in the fixture.

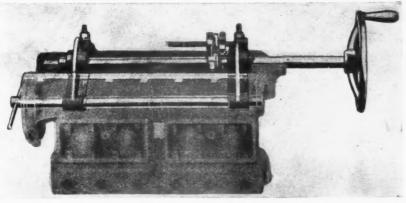
In one of the illustrations we show a machine for aligning and reaming a connecting rod, which, while it has some more or less original features in it, it serves to illustrate the general principle of operation of connecting rod tools of this kind. In this machine the proper relation of the crankpin end of the rod to the wrist pin end is assured, so the rod will centralize between the piston bosses. With this machine it is advisable to allow from .003 to .005 in. of the edge of the bearing shell to project from the rod and cap after setting them in place. There always is some spring to the shells and the precaution just referred to will seat them firmly.

Wrist Pin Fitted First

Where shims are used put in enough to allow from .015 to .030 in. to ream out of the babbitt, although it is possible to clean up the surface with much less, even as low as .002 in., where resizing. All holding screws or dowel pins should be countersunk well below the surface of the babbitt and the shims should be back far enough to clear the reamer blades as a chip of the harder metal may stick to the cutting edges of the blades and score the reamed surface badly; (after finishing reaming the job and while fitting to the crank pin shove the shims against the shaft to retain the oil pressure where the pressure oiling system is used.)

"Mike" up the crank pin and allow about .001 in., to the inch of crank pin diameter (for oil space); for instance, 2 in. pin .002 and set the reamer to that oversize always going by the largest pair of blades, as no expanding reamer will expand the blades uniformily and be sure

(Continued on page 18)



In some of the main bearing boring and reaming fixtures the alignment is secured by a bar placed in the camshaft holes

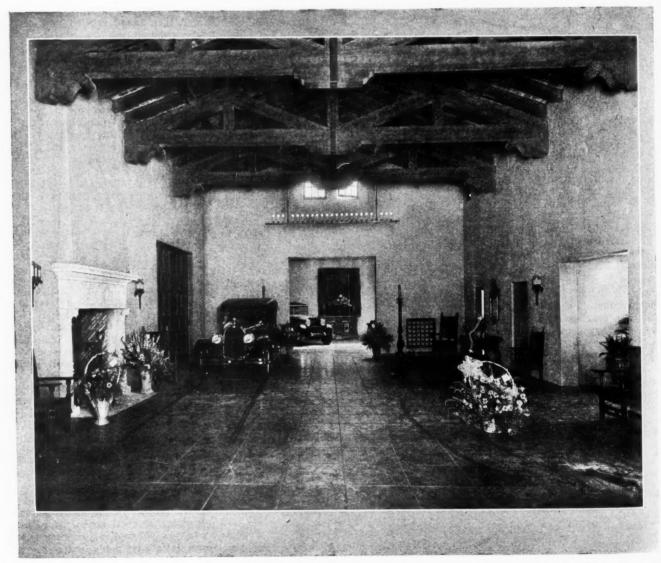
California Dealers Are Setting a Pace in Architecture That Bids Fair for the Lead

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Spanish Style Breathes Atmosphere of Past Into Modern Business Homes and Gives Them Standing in Traditions of the Country





The main salesroom is characteristic of the old Spanish days and could easily be mistaken for an old mission with its decorative massive tressed roof and severely plain walk

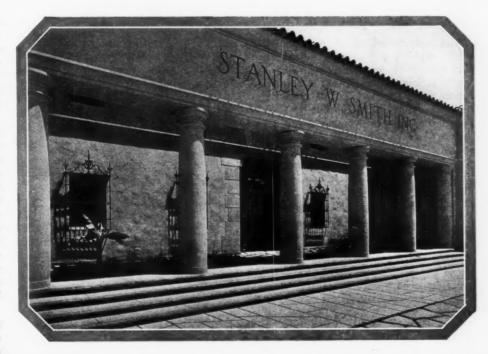


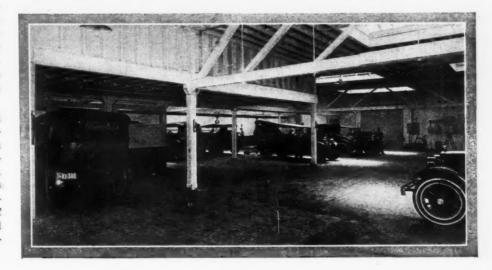
THE new home for Peerless cars in Hollywood, Calif., erected for Stanley W. Smith, Inc., the Southern California distributors, presents a number of features novel in automotive architecture. The building is not particularly large nor pretentious, but decidedly unique.

Of Spanish type, this building has four showrooms, three for new cars and one for used. Two of the new car salesrooms are built in the form of wings to the main room, which crosses the entire front section. It is the idea of Mr. Smith that one or two cars spaciously accommodated make a much better impression on the prospective customer than to crowd many cars into a single room. The number of salesrooms also provides opportunity to segregate open and closed models in both six and eight-cylinder type of Peerless cars when desired.

The exterior of the building is finished in stucco with tile roof. The main entrance is through a patio decorated with flowering plants and shrubbery. The flooring is of flagstones with grass growing in the crevices. Flagstones and flower beds are incorporated in the parkway that leads to the curb. The interior decorations are enhanced greatly by antique furnishings and the main salesroom has a ceiling of heavy beam timbers.

The Hollywood store is conducted in the nature of a branch of the main establishment in Los Angeles, but provision is made for all service details. The service room has an area of 5,000 square feet. The stall system for cars at the bench is employed and fourteen can be accommodated simultaneously. An ample stock of parts, cared for in steel bins, is housed on a mezzanine floor in the service department.





Improved Hood Lines and Engine Changes in Maxwell Car

Ten Per Cent Increase in Power Output;—Balloon Tires Now Regular Factory Equipment

By DONALD BLANCHARD

I MPROVED hood lines and detail changes in the engine which have resulted in a 10 per cent increase in its power output, are the outstanding features of the new series Maxwell. Duco finish is being used on all models. Balloon tires are now regular factory equipment, the size being 30x5.25 in. on all models except the standard sedan which is fitted with 30x5.77 in. tires. Prices remain the same with the exception of the standard sedan which now lists at \$1345 instead of \$1325.

Cylinder Block Height Increased

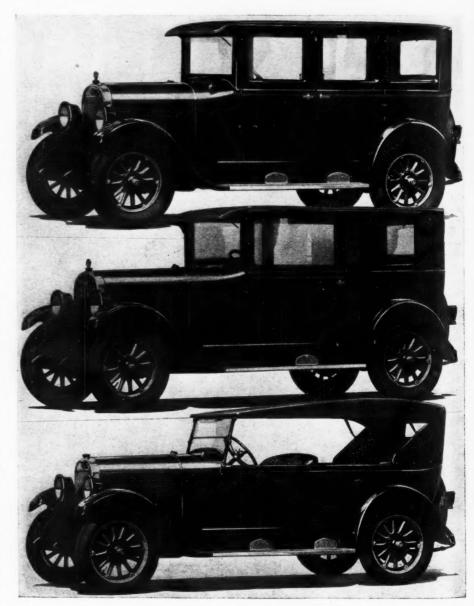
The engine changes are in the cylinder block, valves and pistons. The height of the block has been increased and the water jacketing has been redesigned to secure freer circulation. All valve seats and exhaust ports are now entirely surrounded by water. Number 2 and 3 exhaust ports, which were formerly siamesed, are separate in the new block. The valve diameter has been increased by 3/32 in. and the seat angle has been changed from 30 to 45 deg. The increased output of the engine is attributed to these changes. Piston length has been increased by % in. and the bearing surface of the skirt has been increased by 17/32 in. The added bearing area is all located above the piston pin. The pistons now are reinforced by a flange cast integral with the bottom of the skirt.

Easier Steering Provided

Easier steering has been secured by the adoption of ball thrust bearings at the pivots and by giving the king pins a slight tranverse inclination so that their prolonged axis meet the road surface close to the center of tire contact. The transverse drag link formerly used has been replaced by the more conventional fore-and-aft design. The steering wheel has been enlarged and the spark and throttle controls are of the short lever type located on the top of the steering column. The steering gear reduction has been increased from 71/2 to 1 to 91/2 to 1 to provide the added leverage needed with balloon tire equipment.

Radiator Contour Improved

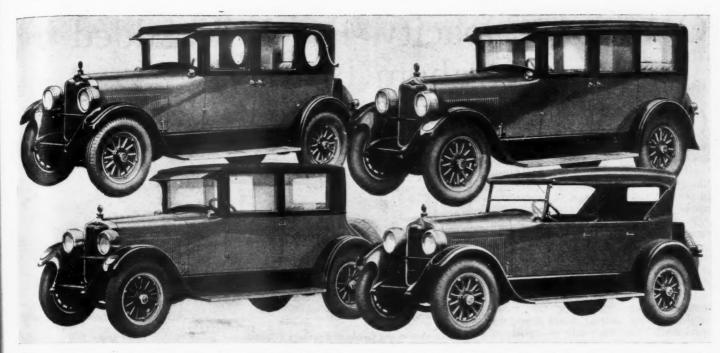
The radiator contour has been improved by increasing the width of the shell slightly at the top. The fender



Top: The Maxwell Standard Sedan which is priced at \$1345. Center: The club coupethe integral visor is a feature of all Maxwell closed models. Lower view: The fivepassenger Maxwell phaeton—detail revisions have been made in the lines of this model

width has been increased by an inch and the skirts are deeper. To accentuate the appearance of the length, the running boards are 1½ in. lower and the splash apron has been deepened proportionately. This change has not, however, reduced the road clearance. The appearance of the headlamps has also been improved. The instruments are now grouped in an oval panel formed by a bead molding pressed into instrument board. In the

open models, blue leather has replaced black and the standard sedan is done in tan and blue striped velour. The belt line molding on the latter model has been changed so that all windows are now the same height and a triple belt line stripe of gold and red has been added. The closed models all have integral sun visors and one-piece windshields. Natural wood wheels are regular equipment on all models.



Four of the new Peerless Equipoised Eight models. Upper left, five-passenger town brougham; upper right, seven-passenger surburban sedan. Lower left, the five-passenger coupe and lower right, the four-passenger touring phaeton. The new radiator shell is in nickel

Inherently Balanced V-Type Engine in Peerless Equipoised Eight

Counterweighted Crankshaft Responsible for Elimination of Vibration.

Detachable Cylinder Heads Now Used. New Line of Bodies

A N inherently balanced V-type engine, which is free from vibration at all speeds, and an entirely new line of seven body models are the outstanding features of the new Peerless Equipoised Eight. The appearance of the car has been considerably altered and improved by a complete change in the shape of the radiator and in the hood lines. Hydraulic four-wheel brakes and 33x6.60 in balloon tires are regular equipment. An important improvement from the maintenance standpoint is the adoption of the detachable head construction.

Combustion Chambers Machined

A counterweighted, two plane crankshaft is responsible for the elimination of vibration in the new engine. In this shaft, crank throws Nos. 2 and 3 lie in a plane at right angles to the plane of crank throws Nos. 1 and 4. Formerly all four throws were in the same plane, the general layout being the same as for the crankshaft of a four-cylinder engine. With the new type of crankshaft the unbalanced forces caused by the inertia of the reciprocating parts are of such a character that they may be equalized by counterweights attached to the crankshaft. In the Peerless design there are four forged steel counterweights secured to the crankshaft by nickel steel bolts. These counterweights are of such size and so placed on the shaft that they set

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up forces which are equal and opposite in direction to those produced by the inertia of the reciprocating parts and consequently the two neutralize each other.

The new crankshaft is considerably heavier and stiffer than the old, the diameters of the main and crankpin journals now being 2¼ and 2½ in. respectively. The main bearing lengths are 2%, 3 and 3¾ in. in order from front to rear. The crankpin length is 3 in.

The new type of crankshaft has naturally altered the firing order and the sequence of explosions is now 1-R, 1-L, 4-R, 4-L, 2-L, 3-R, 3-L, 2-R. The valve timing has also been altered. The inlet valve opens and the exhaust valve closes at top dead center. The former closes 47 deg. after and the latter opens 47 deg. before bottom dead center. With this timing the distribution of fuel to all cylinders is said to be practically uniform.

A 1½ in. plain tube Stromberg carbureter is now used as regular equipment. Heat is supplied to the mixture in the same manner as in the former model but a control feature has been added so that the heating jacket can be entirely cut off from the exhaust manifolds. This jacket connects the exhaust manifolds on each block and is cast integral with the connection between the two intake manifolds. Formerly provision was made for closing the entrance to this jacket on one

side only but in the new engine, it may be cut off at both ends to meet driving conditions imposed by hot weather.

With the new detachable head construction, the combustion chambers are completely machined which gives greater uniformity of compression volumes with a consequent improvement in the smoothness of the engine. The compression ratio has not been changed but the volumetric efficiency has been somewhat improved by a change in the shape of the cams which gives a longer period of maximum valve opening, the result being an increase in the output of the engine. The detachable head itself differs somewhat from the conventional in that the split is not perpendicular to the axes of the cylinder bores. This design was made necessary by the fact that the valves are set at an angle as, with this valve arrangement, conventional practice could not be followed.

Rear Axle Semi-Floating Unit

Detail changes have been made in the transmission. The thrust buttons formerly used in the mainshaft pilot bearing has been discontinued and these forces are now absorbed by the ball bearings supporting the ends of this shaft. This shaft is now a six-spline design instead of the square type used previously.

Timken front and rear axles with (Continued on page 21)

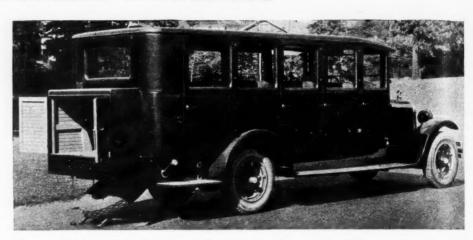
One-Ton Capacity Truck Is Added by Graham Brothers

RAHAM Brothers are now in production on a new 130-in. wheelbase, one-ton capacity truck chassis priced at \$1175, and on bus chassis in 140 and 158-in. wheelbase lengths respectively at \$1550 and \$1640. The 1½-ton capacity chassis is continued in 140 and 158 in. lengths, the respective prices being \$1375 and \$1425.

The new truck chassis has a gross load capacity, including cab and body, of 2750 lbs., and a speed rating of from 25 to 30 m.p.h. The engine, which is three point suspended, is the standard Dodge Brothers unit with 3% in. bore and 41/2 in. stroke. The lubrication system is a pressure-splash type with the pump driven through helical gears from the crankshaft. Cooling water is circulated by centrifugal pump. Fuel is carried in a 121/2 gal. tank located under the driver's seat and is fed to the carbureter by a Stewart vacuum system. Electrical equipment includes a North East Distributer with automatic advance and a 12-volt starter-generator unit.

Frame Side Rails Are Flat

Clutch and transmission are mounted with the power plant. The former is a dry multiple disk type and the latter a three speed, selective unit. Power is transmitted through a tubular propeller shaft with metallic universal joints at



Here is shown the Graham Brothers 17-passenger sedan model. The spare tire is carried under the compartment at the rear

either end. The construction at this point differs from the 1½-ton chassis which has a two-piece propeller shaft with three universals and is centrally supported from a frame cross member.

The rear axle is semi-floating type with helical level gears providing a reduction of 5.1 to 1. It is similar to that used in 1½-ton model except that, instead of having the pinion shaft mounted in a separate member which bolts to the axle housing, it has this shaft supported by the differential carrier. As in the larger

axle, this shaft is straddle mounted in ball bearings and the axle shafts are supported by taper roller bearings at both ends.

The frame side rails are flat and have a depth of 6 in. and a thickness of $\frac{3}{10}$ in. Semi-elliptic springs of alloy steel are used front and rear. The former are 37 in. long, 2 in. wide and have eight leaves. They are located directly under the side rails. The rear springs are $46\frac{3}{4}$ in. long, 3 in. wide and have seven

(Continued on page 20)

Need Right Equipment for Good Bearing Work

(Continued from page 13)

to adjust to size by the lands just back of the cutting edges of the blades.

The wrist pin must be fitted first (or clamped in the rod); the rod is now ready for testing for straightness. Put the adapter ring (with large enough hole to clear the reamer) into the recess on top of the graduated screw supporting sleeve and lower it far enough to clear the big end of the rod and clamp the wrist pin in the sliding V-block. Raise the graduated screw base until it barely supports the big end of the rod. If the rod is fairly straight the bearing flange should lie flat on the adapter ring. If the rod is crooked remove to vise or press and straighten same replacing in the machine for checking.

Take a reading of the figures on the graduated screw supporting sleeve, the zero point being level with the top surface of the sliding V-block and the direct reading is in thousandths of an inch, the screw being ten thread and the top having one hundred divisions.

Say the figure 2 shows on the side of the screw base and the 50 mark on top of same. The offset of the rod is .250 in. which is ¼ in. Other dimensions are read in the same manner.

The correct setting for straight rods

(having even offset on both sides) is found by taking a micrometer reading of the length of the bearing and wrist pin end and subtract the latter from the former and divide by 2.

Object to Secure Even Cut

Having properly located the graduated screw supporting sleeve the reamer head is secured to the tubular wrench which fits over the fixed pilot and placed over the same. The reamer blades have a tapering point or cutting edge and releasing the clamp screw of the sliding V-block allows the reamer to center the rod, (a light blow with the hand on top of the tubular wrench being the best method): Clamp down the sliding V-block and raise the quick acting clamp screws (which are of tool steel and have hardened points) to about the middle of the big end bearing and bring in contact very gently both clamp screws and tighten against each other at the same

Raise the reamer head straight up (it will be stuck in the babbitt) and turning

very slowly by hand see if the reamer cuts evenly all around (or on opposite sides) and use the clamp screws to correct any sidewise inaccuracy.

If the bearing cap sides do not show up even with the rod side, tap the rod endwise with a hammer until it shows a uniform cut in cap and rod; clamp down the V-block firmly and proceed to ream the bearing. Turn the reamer very slowly and with a very light feed, watching the cut to see that the bearing will clean up.

Now is the time to correct any inaccuracies in the first centering operation and for shifting the rod use a light touch on the clamp screws or a light tap with the hammer on the rod. The whole object is to secure an even cut all around.

Where there is plenty of babbitt to be removed, there is no great care necessary. Pass the reamer head entirely through the bearing and remove the rod from the fixture. If a facing and fillet cutting tool is available, withdraw the reamer and face the flange and cut the fillet. Remove the cap from the rod and place it in its proper position on the crank shaft, being sure that there is ample fillet clearance. The rod should turn freely on the crank pin and with little or no side shake.

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Left: Backing up to the concrete mixer. The driver can see exactly where he is going. Right: About face. The load is dumped and truck is ready to drive away without turning around

Mechanical Features of Two Way Drive Super Trucks

Ingenious Construction of the Brake Pedal and Clutch Layout Together
With Special Type of Axle Make It Possible to Operate Vehicle
Backward as Easily as It Is Driven Forward

SPECIAL problems call for special construction. In the building of roads the conventional trucks must drive over obstructions, through soft dirt and over rocks to carry their load to the scene of action and then must either be turned around by a turntable or in other cases back a long way where the going is bad.

The Two Way Drive Super Truck, made by the O'Connell Motor Truck Co. of Waukegan, Ill., is designed to overcome these disadvantages of the conventional truck and the manner in which the truck has been adapted to this work brings to light some interesting mechanical details. The two illustrations of the truck at work tell the story as far as external operation is concerned, for in addition to the conventional seat, there is another one mounted out over the hood, on which the driver sits when the truck is to be driven backward.

The clutch and brake pedals come up practically vertical through the floor boards and can be operated from either seat position. When the pedal normally used for the clutch is pushed in the reverse direction it becomes the brake pedal, while the brake pedal becomes the clutch pedal. In this way the driver does not have to become used to any different action and instinctively does the right thing.

The transmission is so designed as to give five speeds all in the same direction and the reversal is accomplished by a

special construction in the rear axle. In the illustrations of the truck the lever at the side operates this reverse in the rear axle. In this way a wide range of gearing is available for negotiating

difficult places encountered in road construction, while at the same time high speed gearing is available for use in both directions so that time may be saved when the truck is running light or where the road is good.

The general principle on which the pedal reversal is obtained is shown in Fig. 1. This illustration shows the clutch and brake pedals as they would be seen when looking at the left side of the vehicle except that they have been shown separately instead of in line with each other, in order to make the principle of operation clear. In this figure the front of the truck is to the left, and the left pedal in this sketch is the one normally used as the clutch, and operated by the driver's left foot when the truck is being driven forward. The pedal at the right is one used normally for operating the brake.

If we now consider the action of the brake pedal we see that if it is pushed to the left it will tighten the chain which goes back to the brake cross shaft. It will therefore operate to set the brakes. The clutch pedal on the other hand, if pushed forward or to the left in the sketch, will act to loosen its chain, so that it will have no effect on the brake cross shaft to which this chain is also connected.

When the driver has reversed his position and is facing the rear he will push the brake pedal in the reverse direction, using his left foot. The chain will then be loosened and the

> lower member of the brake pedal linkage will act against the adjustable stop on the clutch throwout arm, thus operating the clutch. The clutch pedal on the other

(Continued on page 39)

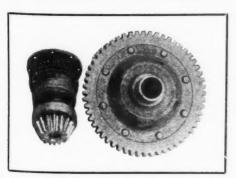


Fig. 3.—The bevel pinion which drives the reverse bevel gears and the bull gear which contains the differential

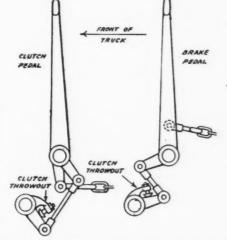


Fig. 1.—The clutch and brake pedals do a Dr. Jekyll and Mr. Hyde act

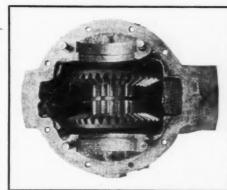


Fig. 2.—Rear axle reversing mechanism

Back Rests and Seat Cushion Move in Unison in New Type of Seat

MPROVED riding qualities and reductions in manufacturing and maintenance costs are among the advantages claimed for a new type of seat which has been developed and patened by the Unison Seat Co. of America, General Motors Building, Detroit. In this seat, the frame of the seat cushion rests on a group of hour-glass springs supported by the seat pin, and is hinged to the frame of the back cushion. The latter cushion is mounted in guides so that it is free to follow the up and down motion of the seat cushion frame on its carrying springs. The Chrysler roadster is being equipped with this type of seat under a license from the Unison Co.

Free Motion of Seat Provided

The construction is shown diagrammatically in the accompanying sketch which is for a rear seat in a passenger car. The frame of the seat cushion A rests on the carrying springs C which are in turn supported by the seat pan D. It is also joined to the frame of the back cushion by the hinge L. Mounted on the back cushion are guide brackets I to which are attached tracks K. These tracks fit into channels J mounted on the sides of the seat strainers H. The cushions are upholstered in the conventional manner.

Free motion of the seat with respect to the body is provided for by allowing sufficient clearance at the edges of the cushions to prevent binding with resultant friction which would restrict the up and down movement. By having the back cushion connected to the seat cushion so that the two move in unison,

the polishing action on the passengers' backs which is obtained when the two cushions are installed in the conventional manner, is avoided. Consequently no friction which would act against the free motion of the seat, is developed at this point. In addition, the wear and disarrangement of the passengers' clothing is avoided.

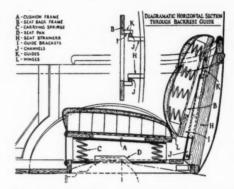


Diagram of Unison seat, the back rest of which moves with the occupant instead of polishing his clothing

When the wheels of the car pass over an irregularity in the road, the resultant shock, which is transmitted through the chassis springs to the frame, is largely absorbed by the seat carrying springs and consequently does not cause discomfort. In fact, the weight of the passengers has much the same effect as a shock absorber in restraining the motion of the chassis frame without, however, the passengers' being conscious of this action.

The seats are readily removable which is an important feature. In the factory,

the seats may be upholstered in the trim shop, covered with cheese cloth and put in stock until the car is ready for final inspection at which time they are withdrawn and installed. In this way the liability of damage to the seat upholstery while the car is on the production line, is avoided with a consequent saving of salvage expense. It is also claimed that the body does not have to be sent to the trim shop as the top and side linings can be tacked in place while it is on the production line.

In the service station, the cushions may be removed for cleaning or recovering. The removable feature is also an important advantage where it is necessary to take dents out of the body panels, or when the car is repainted. For the owner, of course, it makes it possible for him to carry loads in his car that would damage the upholstery on the seats if they were not removed.

Savings in Body Cost

In a demonstration of the Unison seat in a Maxwell sedan over some of the roughest streets in Detroit at speeds ranging from 15 to 25 m.p.hr., the shocks produced by bumps and depressions in the road, were practically absorbed and, at no time, was there any tendency for the passengers to be thrown off the seats by the reaction of the chassis springs on the frame. This latter fact permits reduced headroom with resultant savings in body cost and improvement in appearance. In riding over rough pavements, the sensation was much the same as would be experienced in a car with conventional seats when passing over a fairly good cobblestone pavement.

Graham Bros. Add New Truck

leaves. They are hung from brackets riveted to the sides of the frame channels. The steering gear is a worm and wheel type with 17 in. steering wheel. Wheels are of the artillery type with wood felloes and are fitted with 35x5 in. pneumatic tires on demountable rims.

Five Bodies Are Furnished

Equipment on this chassis includes flat back shroud with pressed steel instrument carrier; instrument board with speedometer, oil gage, locking ignition and lighting switch, ammeter and carbureter dash control; front and rear fenders, full length running boards and splash shields; front bumper; tire carrier and rim under rear of frame; electric horn; tools; grease gun; electric head lamps with dimmer, combination tail and stoplight, and dashlight. Nickel radiator shell and disk wheels are optional equipment at additional cost.

Five bodies are furnished on the oneton chassis. They have a wooden framework with steel panels and are finished in gray Duco. Prices are as follows:

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Express	3		\$1345
Stake .			\$1385
Canopy	************		\$1380
Screen	************		\$1415
Panel			\$1445

These prices are with open cab, the closed type being furnished at an additional cost of \$30.

Ford Increases Size of Oil Pipe Funnel

Lubrication of the Ford Model T engine has been improved by an increase in the length of the funnel on the crankcase oil tube from 1½ to 3½ in. With the new design, the funnel collects approximately twice as much oil for delivery to the front end as the old design. It is also said to give better lubrication on steep inclines and in cold weather. In the latter case, the oil becomes congealed and the

flow is slow when the engine is started. The larger amount collected by the new funnel insures oil reaching the front end more quickly. The additional oil collected in the funnel also increases the pressure in the tube and consequently there is less chance of its becoming clogged.

FRENCH EXPORTS INCREASE

PARIS, Oct. 24 (By Mail).—An increase of 67 per cent on French automobile, truck and tractor exports in shown for the first eight months of this year, compared with the corresponding period of 1923. The number of passenger cars sent abroad was 28,376, and the number of trucks 2,815. The greatest volume of business in passenger cars was done with England with 5,121, followed by Belgian-Luxemburg with 5,019. Germany purchased 3,721 French automobiles and Spain 3,620. The number of French passenger cars sent to the United States

Many Refinements Made in the FWD Model B Chassis

THE Four Wheel Drive Auto Co., Clintonville, Wis., is announcing its new FWD truck which is the standard Model B 3-ton with many improvements in construction and design. In spite of the many improvements made the company has not changed its original policy of interchangeability of parts. Any parts of the FWD truck built today will fit any FWD built since the company began manufacturing in 1910.

One of the changes made was in the conversion of the seat frame into a two-piece assembly, lowering the seat 5 in and moving it back 4 in, to give more leg room for the driver. With the two-piece frame the section over the engine can be easily removed without disturbing the control and acceleration units, steering post or radiator. This gives better accessibility to the engine and more comfortable position for the driver.

Strength of Springs Increased

The engine oil base has been increased in size giving a capacity of 10 quarts instead of 6. There is a small reservior in the center of the base surrounded by a filter screen. All oil returning from the oil lines enters this reservior. The oil then overflows over the top of reservior through the screen and works its way back toward the oil pump.

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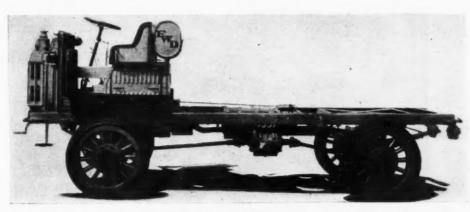
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The strength of springs has been increased by increasing the number of leaves. Twelve leaves are now used in the front spring and fourteen in each of the rear side springs. The rear cross spring has been eliminated. All spring eyes have bushings for % in. bolts. The old shackle bolts were %in. in diameter.

Several improvements have been made in the engine. The intake manifold is now arranged with a hot spot which gives a much better vaporization of fuel. The carbureter has been changed to the Stromberg M-2 type 1½ in. and is now placed on the exhaust side. Although this carbureter is smaller than the one previously used it is much better adapted for handling the low grade fuel now ob-



Side view of the FWD Model B chassis in which many refinements have been made

tainable. The change of carbureter resulted in a change of governor and governor drive. By making this change the flexible shaft is omitted and in its place there is a solid shaft which is driven from the front end of water pump shaft. The new governor drive operates the governor at engine speed, whereas the old drive operated governor at one-half engine speed. In order to prolong the life of the timing gears the idler gear stud and bushing has been changed. The idler gear stud has been made larger and has an out bored bearing in the front cover plate. The lower piston ring has been changed to the perfect circle type. This piston ring has been tried out for some time and has been found to reduce the oil consumption materially. The long type breather and oil filler has been improved by the adoption of a shorter aluminum breather.

The full floating axle shafts in the past were designed with square ends. This type of shaft has given very good service but changing from the square to the spline ends results in an increase in strength of 40 per cent.

The Dot high pressure lubricating system now takes the place of all grease cups.

The oil grooves in the lower half of the connecting rod bearings have been omitted. The grooves in the upper half have been refined to give the proper lubrication where it is essential.

A center differential lock control attachment on the dash permits the driver to engage the lock from the driver's seat.

The cross member behind the transmission has been changed from heavy carbon to chrome nickel steel heat treated.

Tubes Substituted for Propeller Shafts

The old differential screw type steering gear has been replaced by the cam and lever type. The reduction is increased giving a greater leverage and a much better control of the truck.

The change made in the old service brake, is that the diameter of the drum has been increased from 10 in. to 11½ in. and the width from 3½ in. to 7 in. The brake drum is mounted directly on the end of the transmission shaft, thereby eliminating the two roller bearings, driving sleeve and driving dog. The changes eliminate the necessity of lubrication and assures the truck owner of a rigid, serviceable brake acting on all four wheels of the truck.

The squared propeller shaft joints have been changed to splined fittings. Tubes have also been substituted for the propeller shafts. As tubes are much lighter than the shafts, the load on universal joints is thereby reduced.

New Peerless Models Announced

(Continued from page 17)

hydraulic brakes are used. These are of the same type supplied on the former model when furnished with four wheel brakes and balloon tires. The rear axle is a semi-floating unit and the front a reverse Elliot with ball thrust bearings. The steering gear is a Gemmer with a reduction of 11½ to 1 as compared with the 9½ to 1 gear furnished formerly with high pressure tires. Rear springs now have 10 to 11 leaves on open and closed models respectively as compared with 8 and 9 leaves used previously.

The new line of bodies consists four-passenger phaeton, five-passenger town brougham, seven-passenger berline limousine, seven-passenger suburban sedan, five-passenger coupe, four-passenger victoria, and five-passenger sedan. The standard color is Peerless blue, but the following options are offered at no addition cost; coach painter's light blue, desert brown, biege brown, scotch gray, brewster green. In each case, the bodies, hoods and wheels are striped to harmonize.

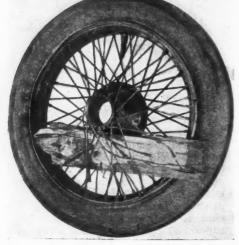
Regular equipment includes tire carrier and lock, nickel plated radiator shell, tool compartment with lock, snubbers, front and rear, automatic windshield wiper, combination tail and stoplights, cowl ventilator, inspection lamp with extension cord, and motometer. Closed models have adjustable sunvisors and one-piece windshields. The shells of the head and sidelamps are of solid nickel alloy and consequently their finish can be maintained indefinitely by polishing.

(Continued on Page 41)

MOTOR AGE'S PICTURE PAGES



Orsinger Motor Co., Flint dealers at San Antonio, Texas, capitalized the motion picture, "In Every Woman's Life," by having four of the ushers at the Palace theatre, where the film was shown, pose in front of the Flint cars. A slide was made and flashed on the screen before each performance at the theatre



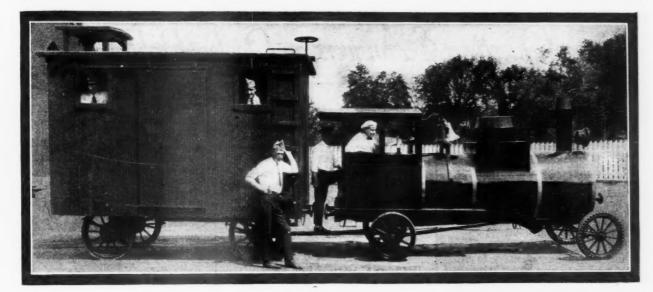


Left: Marion Hopping, race driver, crashed into a fence at Danville, Ill., while going 75 miles an hour and a 2x6 plank was imbedded in one of the wheels and broken off. The Dayton Wire Wheel Co. keeps this wheel on display as evidence of the strength of its products. Right: Pierce-Arrow bus of 220-in. wheelbase in operation between Providence, R. I., and Fall River, Mass. It is equipped with parlor car body accommodating 20 passengers in addition to the driver. Each passenger occupies an individual parlor car chair



Southern Hardware & Woodstock Co., New Orleans, La., promotes Christmas sales of automotive products by means of this Ford roadster to which is attached a Christmas box containing samples of automotive merchandise. The roadster top, body and chassis are painted a pale blue, striped in white; the main portion of the box is white with holly and red ribbon on the corner. The painting is done to show that the box is tied up and there is the usual gilt seal that goes on such packages

OF AUTOMOTIVE INTEREST



Above: Members of the American Legion post of Jacksonville, Ill., have completed the construction of a replica of a French box car and locomotive which they will take with them to all state and national encampments. These cars were used largely during the World War. Below: A large clock was mounted in the tonneau of this Maxwell.

Opposite the numerals on the dial 12 reasons

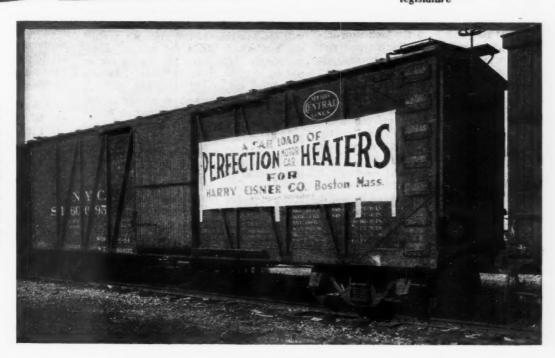




Ezra Meeker, 94 years "young" of Seattle, Wash., and his curved-dash 1-cylinder Oldsmobile, both still "running strong." He used it in his campaign for a seat in the state legislature

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Here we have another case of "informing the world." The Harry Eisner Co., New England distributors of Perfection heaters, have anticipated the winter demand by buying an entire carload, and they are now all set to make winter driving comfortable for their customers. The consignment included all models of the heater and places the consignee in a position to make prompt deliveries





The READERS CLEARING HOUSE

Questions & Answers on Dealers Problems

By Their Brake Drum You Shall Know Them

What is the right way to remove a clutch so a new facing can be put on a 1916 Dodge Brothers touring car? I also want to remove transmission case, except gears in same, and put bushing in case where clutch shaft has worn it large. What is the right way to put in the facing and install it in the car? I have asked seven mechanics (so-called) and have had seven different answers, except one that admitted he did not know.—Western Machine & Grinding Co., Iowa City, Ia.

If the Dodge car in question has large brake drums it will be necessary to uncouple the rear axle and move it backwards. If the car has small brake drums it is a method of identifying the model which does not require removal of axle from spring sockets. At any rate the requisite is that the transmission be given clearance so that it can be moved backwards. In cases where the small brake drums are used the universal joint may be disconnected in front and the drive shaft dropped down to clear the transmission. There is some difference of opinion, right there, regarding the best method, but it is the experience of the local Dodge Brothers service organization that on all styles of this car the removal of the rear axle requires considerably more time so wherever possible they remove the transmission without interfering with the axle. Factory information recommends removal of the rear axle on all models.

We shall assume now that the axle is moved backwards or at any rate the rear universal is disconnected. The next step is to place a jack under the rear of the engine. Jack the engine up to a point where resistance is just felt on the jack handle. You now have the jack supporting the rear end of the engine and you can proceed to remove the transmission by taking out the screws and bolts that pass through the mounting brackets. When these bolts in question are removed the engine will drop unless it is supported and it is for that reason the jack has been previously placed under the engine. With the bolts removed you may now pull the transmission back-

With this done you still have the clutch which must be unloaded before it can be removed. In other words the spring pressure of the main clutch spring must be released so that you can withdraw the clutch or cone. There are several methods of doing this, depending on the amount of equipment available. One method consists of nailing a wooden cleat on the floor directly beneath the end of the clutch shaft exposed, when the transmission is removed. Insert a couple of pieces of broken leaf spring be-

The Readers' Clearing House

THIS department is conducted to assist dealers and maintenance station executives in the solution of their problems.

All questions are answered direct by letter, so the name and address should be given in full. This saves waiting for the answer to be published, which sometimes occurs several weeks late, depending upon the space available.

Readers' names will not be published with articles, if a request to this effect is received with the letter.

Inquiries not of general interest will be answered by personal letter only. Emergency questions will be replied to by letter or telegram.

Also state whether a permanent file of MOTOR AGE is kept, for many times inquiries of an identical nature have been made and these are answered by reference to previous issues.

Addresses of business firms will not be published in this department but will be supplied by letter.

Technical questions answered by B. M. Ikert, P. L. Dumas and A. H. Packer; Legal, by Wellington Gustin; Paint, by G. King Franklin; Architectural, by Tom Wilder; Tires, by a Practical Tire Man; General Business questions, by MOTOR AGE organization in conference.

tween the second coil of the clutch spring and when they are securely wedged there, place a two-by four against the cleat on the floor and exert pressure forward on spring leaves. This will tend to release the pressure against the nut which holds the spring in engagement. Now turn the clutch spring nut or as it is called by Dodge Brothers the clutch spring adjusting nut, off.

Still another method of unloading this clutch is to use a two by four or better still a two by six, drill a hole in it at the proper height of a diameter necessary to pass the clutch spring adjusting nut and small enough to engage the spring. With this method you will use the same crowbar principle as before mentioned but instead of using the spring leaf you will have the two by six over the spring adjusting nut and have it bear against the spring proper. When you have the nut off, the clutch cone will come loose and may be pulled out. When the clutch spider is removed examine carefully the square portion of the steel hub.

In most cases you will find the square hub is worn considerably and that is the cause of noisy clutch operation. There

(Continued on page 26)

Use a Heavy Duty Engine

I want to pump water to irrigate total head 60 feet, total length of pipe 400 feet, size of pipe 5 inch. I want to deliver at least 350 gallons per minute, using American Centrifugal pump, size 3½ inch, discharge 5 inch suction. I have been told that the pump should run 800 r. p. m. and want to use a Buick model D-35 engine. The question is will the engine pull the pump and how large pulley would I use on pump and engine? Would I have any surplus power? Pump now has 8 inch pulley, but could be some larger if necessary. Would want to run night and day for about 10 days to complete each irrigation.—E. J. Holloway, Box 42, Paonia, Col.

Engine requirements for the delivery of 400 gallons per minute-against the head of 60 feet are 12 to 121/2 h. p. Providing the Buick D-35 engine is in good condition and is supplied with a hot spot in the inlet manifold it should be possible to operate this pump with a fairly safe margin of power reserve. Unfortunately we do not have a power curve on this engine and are therefore unable to tell you the exact speed at which it is operated. Generally speaking, however, the most efficient speed will be in the neighborhood of 1500 to 1700 revolutions per minute. If you operate the engine at 1600 we would suggest the use of four inch pulley on the jack shaft.

We would recommend the engine being connected to a jack or counter shaft in order to prevent side pressure being transmitted to the crank shaft bearings. We believe the Buick engine will pull the pump but as it is not exactly suited for heavy duty work it will not give as good results as a heavy duty engine, of the stationary or semi-stationary type. Above all things be sure the engine is in good condition and the lubricating oil is drained about every 5 or 6 hours.

24 TO 32 VOLTS SUFFICIENT FOR CHARGING FORD MAGNETOS

We would like to know if there is a rectifier on the market to change A. C. to D. C. and still have about 110 volts or not less than 32 volts. Have you a drawing by which we could make one? We wish to use this to charge a Ford magneto. We have the magneto charger, but takes direct current.—Silas Davis. Davis Garage, Cimarron, Kan.

The best way of charging a Ford magneto is by using four 6-volt batteries or 2 12-volt batteries, so as to get a total of 24 volts. We are mailing you by separate letter complete instructions for recharging a Ford magneto and if after studying this you have any additional question we will be glad to answer same.

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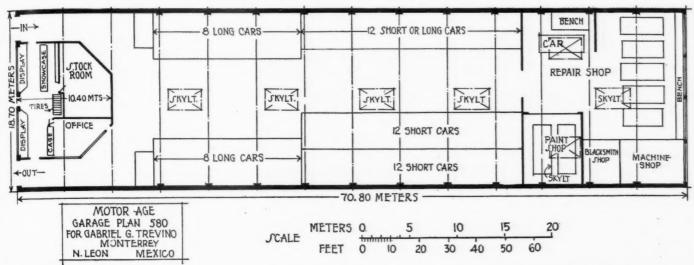
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The Readers' Clearing House

A Long Garage for Fifty Cars



Q.—Having associated two brothers of mine at my garage and repair shop, we have bought a lot on which we want to build our garage and a good and complete repair shop. The lot has front at Matamoros street with 18.70 mts. by 70.8 mts. The ground has a building of old front as you will see in sketch. We intend to construct two stories, but at present only the first floor. In the first floor we wish to put small office in the building that is constructed and accessories, tires, and parts department, in the middle of the storage for cars and in the rear the repair shop, battery charger, blacksmith, upholstery and paint shop. The cars that we want to store you can tell us better. We will employ ten men in the shop only. We will appreciate any advice you can give us.—Gabriel Garza Trevino, Monterrey, N. Leon, Mexico.

Your letter does not indicate that you

intend to sell cars and consequently we have not made any arrangement for showing them, the front part of the building being devoted to accessory sales and offices with an entrance on either side. The garage space takes care of 54 cars more or less according to their size, it being possible to store three rows of short cars such as Fords and Chevrolets and only two rows of longer cars. This makes it advisable to arrange the garage in two parts, one having two rows and the other three. We have not made any arrangements for the addition of a second story later for we believe that unless real estate values are very high in your town. it would be much better to make an addition on the ground floor. If additional

ground is not obtainable, however, we will be glad to take up the proposition of a second story when you are ready for it. The roof of this building is intended to be supported upon 11 trusses spanning the whole width of the building. Skylights will be necessary to give light in the center of the building and in the back part of the shop since, as we understand your lot, light is available only at the front and rear. Skylights, however, will be very satisfactory and give better light than side windows. This is another reason for not considering a second floor which would make the first floor dark. We have attached a scale both in meters and feet so that you can take off your measurements from it.

Architectural Service

IN giving architectural advice, MOTOR AGE aims to assist its readers in their problems of planning, building and equipping, maintenance stations, garages, dealers' establishments, shops, filling stations, and in fact, any building necessary to automotive activity.

When making request for assistance, please see that we have all the data necessary to an fittelligent handling of the job. Among other things, we need such information as follows:

Rough pencil sketch showing size and shape of plot and its relation to streets and alleys.

What departments are to be operated and how large it is expected to be.

Number of cars on the sales floor.

Number of cars on the sales floor.

Number of cars it is expected to garage.

Number of men employed in repair shop.

How much of an accessory department is anticipated.

Quick Repairs for Small Jacket Cracks

Q.—Advise if you know of a formula for repairing small cracks in cylinder heads and water jackets, aside from welding? We believe there is a preparation containing black iron, muriatic acid, sulphur and other ingredients, and the thought occurred to us that perhaps you had heard of it.—Foss-Hughes Company, Philadelphia, Penn.

One such preparation is made by using two ounces of sal ammoniac with one ounce sublimed sulphur and one pound of cast iron filings or fine turnings. These ingredients should be mixed in a mortar and the powder should be kept dry. When it is to be used it should be mixed with 20 times its weight of clean iron turn-

ings or filings and the whole mixture should be ground in a mortar. It should then be moistened with water until it becomes of convenient consistency when it is to be applied to the joint or crack. After a time it becomes as hard and strong as any part of the metal.

Another cement may be made by using equal parts of gum arabic, plaster of paris and iron filings and a little finely pulverized white glass added to the mixture will make it still harder. This mixture forms a very hard cement that will resist the action of fire and water. It should be kept in its dry state and mixed with a little water when wanted for use.

The above formulas are taken from the

Scientific American Encyclopedia of formulas by Hopkins.

An emergency repair for small cracks in water jackets may be made by purchasing about a pint of sodium silicate at the drug store. The cost of this is about 30c. Half of this poured into the radiator will stop the average crack. However, if the crack goes into the combustion chamber this repair might not be effectual. We have seen sodium silicate used in this way to stop small radiator leaks and it would doubtless be fully effectual in preventing leakage through cracks in the water jacket where the cracks were from the water chamber outward.

The Readers' Clearing House

Timing Chain Adjustment on Studebaker Light Six

Q. We have a Studebaker light six, 1922 model, which makes a humming sound which seems to come from the engine. It was worked on at another garage recently and we think that possibly the chain was adjusted too tight. How is the chain adjustment taken care of on this car.

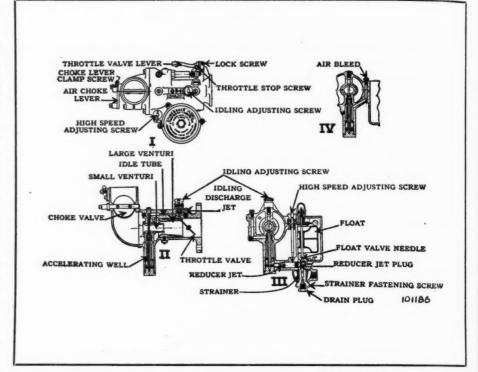
We are showing an illustration which explains the adjustment. Before the adjusting screw can be operated however, it is necessary to loosen the nuts which hold the accessory shaft bearing mounting. The lock nut on the adjusting screw may then be loosened and the adjusting screw turned one way or the other. If the chain is too tight the adjusting screw should be turned to the left, which will allow the accessory shaft bearing to move in toward the center of the engine. This should be moved in a slight amount only and the engine tried to see if this has reduced the noise of which you complain. The test for chain adjustment is to grasp the flexible coupling on the accessory shaft and see if there is any back-lash, by attempting to rotate the shaft backward and forward. There should be just a trifle motion or back lash in the fan pulley when proper adjustment of silent chain has been obtained. After the adjustment is correct the lock nut on the adjusting screw should be tightened and then the three nuts should be drawn up.

Q. How is the oil pump adjusted on this car? In ordinary driving it registers 2 pounds, or even less. What should the reading in pounds be at that speed? Explain how to adjust the oil pump for higher pressure. I am using a heavy oil at present and it does not register any higher than when using medium oil.

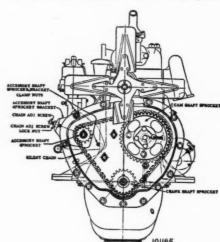
With a lubricating system of this type where the pump merely supplies oil to the troughs into which the connecting rods dip, the pressure indicator on the dash merely shows that the pump is operating. The actual pressure shown will vary somewhat with individual gages, also with the size of oil pipe and the manner in which it is connected. The 2 pound pressure however is O. K. and shows that the pump is operating, so that no change in the pump will be required.

Q. Explain how to adjust the carbureter on this car for best efficiency and show diagram of adjustment, both for high and low speeds.

The idling adjusting screw controls the mixture for operation up to about 8 miles per hour. This operates on the air so that screwing it in gives a richer mixture and screwing it out gives a leaner mixture. Turn screw out until motor slows down and then turn in notch at a time until engine runs properly. The high speed and main driving adjustment is regulated by the high speed needle which regulates the opening through which fuel flows to the jet. This should be turned to the left or counter clock-



wise to give more gasoline or to the right or clock-wise to give less gasoline. To make proper high speed adjustment advance spark lever to normal driving position and open throttle until an engine speed is obtained which corresponds to a car speed of about 25 miles per hour. Then adjust high speed needle to the minimum opening which will give greater engine speed. From this point



two or three notches less may give best economy and two or three to the left may be best for short runs in cold weather, when the motor does not reach normal heat.

Q. Advise what standard the automobile manufacturers use in their rear axles, or drive shafts for bearings. The S. A. E. gives a certain standard that is understood but there are a lot of roller bearings that are not listed in the S. A. E. I suppose the automobile manufacturers or axle manufacturers have a standard of

their own. Could I get a book regarding all different diameter bearings, for example, the S. A. E. does not list bearings have even ½-in. size, such as 1½, 1%, 1%, etc. I am sure there must be bearings of this size.—Buckeye Mechanic.

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In the S. A. E. hand book which we have available there are two pages devoted to roller bearing sizes. You must understand of course that the S. A. E. merely recommends and has no way of forcing bearing manufacturers to conform. You will find however, that the sizes used by bearing manufacturers do conform, although it is of course possible that there may be some bearings made other than standard. We believe you are mistaken about the 1/8-inch size however, as bearing diameters are listed in metric system which when transferred to inches gives odd decimals for the diameter. The various concerns making bearings can no doubt supply you with more detailed information on their individual product.

By Their Brake Drum You Shall Know Them

(Continued from Page 24)

is only one method of eliminating the play in the square and that is to install a new part. The labor involved in installing a new steel hub is so great that it will cost considerably less if you will purchase complete clutch spider assembly, with lining attached. This will mean that you will have not only a new hub but also a brand new spider and a perfect leather facing.

Our recommendation there is that if you purchase a complete clutch spider with lining, that you soak it in a bath of neatsfoot oil for about twelve hours.

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The Readers' Clearing House

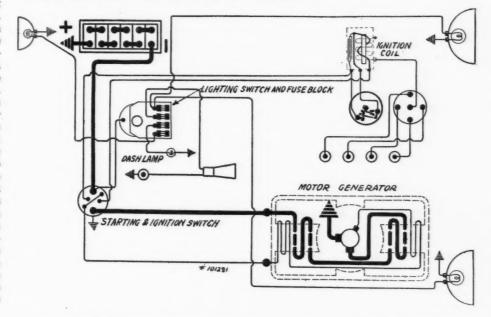
How the Non-Stalling Electrical System on a 1915 Hupmobile Works

Q. Can you send a wiring diagram showing the starting and charging circuits with the contact points and circuits through the starting switch on a 1915 Hupmobile? Would like a full and complete description of the way the starting switch is supposed to function and an explanation of the shunt field circuit.—New Mexico Subscriber.

Wiring diagram is shown in accordance with your request. This is a third brush machine which also has a series winding so that it can operate as a starting motor. There is no cutout and the ignition switch is also the starting switch. When the ignition switch is turned to the on position it does three things. It completes a connection from negative battery to the large terminal on the motor generator. The positive terminal of the battery is grounded and one brush of the motor generator is grounded. The circuit is then from positive battery to ground and through the armature by means of the grounded brush, then through the two series field coils and back through the ignition switch to negative battery. It will be seen that the shunt winding is connected from the third brush through the two field coils, to a terminal which has a small wire running up to the ignition and starting switch. It will also be seen that there is a ground symbol on the ignition switch. The switch then makes another connection for it completes the circuit from the shunt field wire to

ground. From an operating standpoint this is the same as if the field terminal on the machine had been connected to the ground brush. In a non-stalling system of this type, where the machine first operates as a starting motor and then as the engine fires operates as a generator a heavy arc would be produced in the switch when the engine is stopped. This is particularly true if the driver speeds up the engine just at the instant that he turns off the switch. With two separate circuits for the field and armature however, the generator is killed at the instant the ignition switch is turned to the off

position. The ignition and starting switch make still a third connection giving battery current to one of the ignition coil wires and connecting the other ignition coil wire to ground. Some of the 1915 Hupmobiles had an idling position on the starting switch so that with the switch in this position ignition current only was flowing from the battery and the generator was disconnected and inoperative. This was done because at idling speed the motor generator often was turning slow enough to draw current from the battery so that the battery became discharged.



GRADE THAT CAN BE NEGOTIATED BY LOADED TRUCK

We are installing a large gas tank at the foot of a 150 foot incline. Our tank wagon is a two ton, Model 41, International truck, with solid tires. The tank and fittings weigh close to 1,000 pounds. One compartment will hold 385 gallons of gas and the other compartment will hold 190 gallons. We will put in a concrete driveway. What is the best percent grade that we can expect the truck to pull with a full load of 575 gallons? Further, what is the best grade we can expect to pull with only the large compartment of 385 gallons full? Present grade is about 19 per cent, and we want to know if it will be necessary to cut it down.

Information from the International Harvester Company is to the effect that Model 41 truck will handle tank full of sas on 19 per cent grade and ascend in low gear. At the same time, it is strongly recommended that the incline be not over 15 per cent rise. Condition not known, makes this latter a safe grade to ascend. Model 41 will properly handle the load as described.

Give the grades which a Stewart truck Model 12, equipped with 35x5 pneumatic tires would be able to handle the same

loads with.—Staples Motor Company, Harrisonburg, Va.

The Stewart Model 12 truck was built for a one ton truck and as near as we can figure the gasoline load alone will be from 3700 to 4000 lb. In addition to this the average tank will as a rule weigh more than the usual body for such a truck, so that this would very greatly overload a Stewart Model 12 truck.

POWER AND TORQUE CURVES ARE HARD TO SECURE

Publish the maximum speed of the Chevrolet Superior, Overland 91 and of the Star. Also give power curves of the following motors: Chevrolet Superior, Star and Overland 91 and torque curves also.—A. Subscriber, Tiffin, Ia.

The speed of the Chevrolet Superior is between 50 and 55 miles per hour while the Overland will do 45 and the Star about 50 miles per hour. Regarding power curves of the engine mentioned we regret to state that this information is not available and must be secured direct from the factory.

A CHANCE TO CASH IN ON FLAT RATE

Q.—One of the greatest time savers in the business that I have seen is in use by a friend of mine who has an electrical shop. It is a mica undercutter. You can do the smoothest job in a very few minutes with it. A job that would take an hour or so by hand.—D. A. Innes, Brandon, Man., Canada.

The wise shop managers are the ones who are installing equipment of this nature to save time on their work. They further manifest wisdom if they make the equipment pay for itself by flat rate charges or by taking into account the time which has been saved due to the purchase of equipment. However, if equipment is purchased and the saving of one hour is donated to the customer by continuing to use the old system of charging by the hour then the shop loses by the purchase of equipment instead of making money by it. To make money with the undercutter there should be a charge of \$1.00 or \$1.50 added where the armature needs to be turned and undercut. Then if the job can be reduced to 10 or 15 minutes it means that the money made can be applied against the purchase of the equipment and to provide additional profit.

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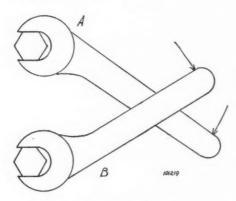
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The Readers' Clearing House

Vibration—Wrenches— Fuelizer

Does the placing of crankpins 90 degrees to each other correct the inherent unbalance common to all four and eight cylinder engines?

We would suggest your studying the explanation of the Lancaster balancer which was given in connection with an article on Willys-Knight cars on page 17 of the August 28, 1924, issue of MOTOR AGE. According to this article the vibration is produced due to the fact that the average speed of the piston is not the



same during the upper and lower half of the stroke. Consequently while one piston going up is apparently balanced by another piston coming down, this is not exactly true and some vibration results. It would accordingly appear as if this same condition would produce vibration in any eight cylinder engine although of course with a large number of cylinders and a corresponding reduction in the bore there is a reduction in the weight of the reciprocating parts which will give smoother operation and reduction in vibration. The basic reason for lack of balance, however, is still there although on a smaller scale.

Q. In using an open end wrench which is the right way to use it, as shown at A or at B?—Winston C. Barker, 136 W. Elizabeth street, Detroit, Mich.

We are reproducing your sketches for the benefit of other MOTOR AGE readers. We do not believe it makes any difference with the ordinary open end wrench which has jaws of the same size at both sides of the nut. In turning a wrench on the nut, however, you will find that the point of contact of the nut in one case comes close to the end or tip of the jaw while on the other side it comes close to the base of the jaw. It would therefore appear as if the jaw which carries the strain at its tip is strained more than the one which carries the contact pressure near the place where the jaw joins the main body of the wrench. This action is particularly noticeable in the case of adjustable open end wrenches, where the adjustable jaw is much weaker than

the permanent jaw. Here it is desirable to always use the wrench in such a way that the force does not come on the tip of the adjustable jaw.

OPERATION OF PACKARD FUELIZER

Q. Send diagram and description of Packard Fuelizer. How can the valve be quieted when the noise from same becomes annoying?—New Hampshire Subscriber.

A diagram of the Packard Fuelizer and carbureter is shown, this description being taken from instruction book covering the Packard single six. The fuelizer is really a small combustion chamber which gets combustible mixture by means of a connection from the carbureter. This mixture is ignited by a spark plug in the side of the fuelizer and burns with a steady flame which can be viewed through the inspection glass on top of the fuelizer. The flame heats the manifold metal and then the hot burned gas mixes with the gas going to the engine from the carbureter. The application of heat to the ingoing mixture improves its gasification, which is particularly important at the lower throttle opening, at which time the fuelizer supplies it maximum heat. As the throttle opens and the engine speed increases the suction on the fuelizer decreases so that its action is eliminated to a great extent. A screen in the fuelizer prevents fire or flame from getting to the intake manifold, only the hot gases being allowed

to come through. As there is no mechanically operated valve used in connection with the fuelizer we suspect that possibly the carbureter valve is producing the noise to which you refer. If this is the case it is possible that the timing chain at the front of the engine has become worn and loose and has slipped a tooth, so that the valves are somewhat out of time. This may result in a fluctuation of pressure in the intake manifold and carbureter which might cause noisy operation of the auxiliary air valve. Checking the valve timing will determine whether this is the case or not.

Using a Ford Coil for Make and Break Ignition

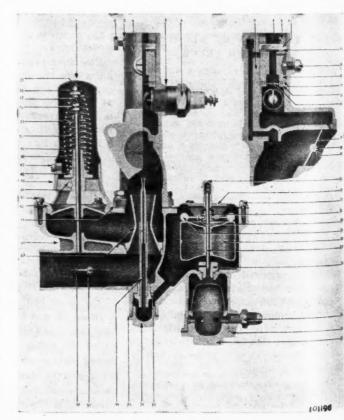
Q.—Advise if it is practicable and if so, the method of connecting, in using a Ford ignition coil on a gasoline engine which has make and break ignition. I have Motor Age issues on file since 1920.—George A. Cook, Langsdale, Miss.

It is doubtless possible to use a Ford ignition coil on a make and break engine but the winding is not ideal for the purpose, for it draws a rather heavy current so that the battery used would run down in a short time. To use the coil it will be necessary to screw down the adjustment so that the vibrating points will be held tightly together. A connection would then be made from the battery to the bottom terminal of the coil and another connection from the top terminal at the side of the coil to the make and break device on the engine. The other battery terminal would be ground. A switch of course could be connected in the circuit as a matter of convenience. The lower terminal at the side of the coil is the secondary terminal which would not be used.

STAR & CHEVROLET POWER CURVES

I would like to know the horse power of both the Star car and the 490 Chevrolet, brake test.—T. R. Cable, 109 N. 6th street, Murray, Ky.

According to figures supplied by the respective manufacturers the Star can develop 35 horsepower at 2500 revolutions. Chevrolet 25 h. p. at 1900 revolutions.



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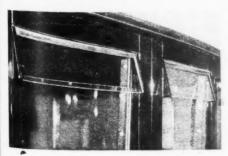
BOOSTING ACCESSORY SALES

HELD to the frame by double-braced fittings, the Halladay fender guard extends beyond the outside of the fender and the broad curved-back ends avoid hooking other objects in close quarters. It is compact, fits close to the fender and does not project as far as rear bumpers. It was designed with a view to eliminating all unnecessary weight, and is manufactured by the L. P. Halladay Co., Decatur, Ill., a sudsidiary of the Biftex Products Co.



flubbard's Ventilating Eaves

These are for installation at the top of the glass in the door or window and on the outside. They slant outward from the top to the bottom. On the regular model the eave is of polished plate glass, supported by metal brackets and resting in a protecting channel of rubber. A special type made entirely of metal has been developed for Ford cars. The device does not interfere with the operation of the windows. It is based on its ability to produce a suction as soon as the car is under way, created for the purpose of removing motor gases, foul air and smoke from the machine. The vacuum or suction also is designed to keep the dust out of the car and to set up a circulation within the vehicle to prevent steamed windows and at the same

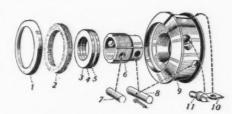


Hubbard's ventilating eaves

time increase the efficiency of the heater. Another feature emphasized by the manufacturer is that the ventilating eaves assure clear vision to the right or left at all times and under all conditions by protecting a portion of the windows from rain, sleet and snow, the protected portion being on a level with the driver's line of vision and from three to six inches wide. The manufacturer is the Hubbard Products Co., Kokomo, Ind.

Adjustable Crankshaft Thrust Bearing

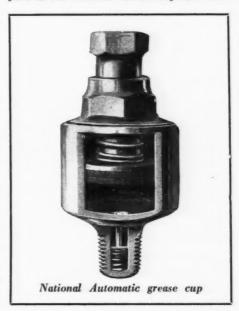
Auto Improvement Devices, 4317 Evans avenue, Chicago, has put on the market an adjustable crankshaft thrust bearing designed to take the end play out of the crankshaft on Ford engines. It is assembled on the crankshaft as shown by the illustration. The purpose of the bearing is to pull the crankshaft forward to its original position, line up the flywheel, magnets, connecting rods, pistons and all parts of the engine and keep them there. Among the advantages claimed for this product by the manufacturer are the following: That it makes the engine, if hand cranked, start by three quarters turn of the crank; that, if equipped with self-starter, it saves the battery; that it eliminates crankshaft noise and that it prevents oil leaking from the front end of the crankcase. For all models up to and including 1919, the price is \$5.65; all models since 1919, aluminum driving pulley, \$7.50.



Adjustable crankshaft thrust bearing

National Automatic Grease Cup

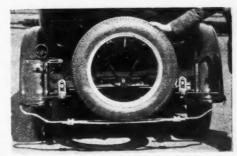
A grease cup designed to supply semiliquid lubricants to moving parts of the automobile chassis at a constant rate has been put on the market by the National Automatic Grease Company, 1603 Michigan avenue, Chicago. This cup, strongly made of heavy material, screws into the oil cup holes provided on the chassis and the cup may be fitted at the intake with the fittings used for attaching any standard make of grease gun. The manufacturers state that the cup will hold enough semiliquid lubricant for two to three thousand miles of operation of the car. A visible gage shows the degree of fullness of the cup. A valve is provided for the regulation of the flow of lubricant, and the manufacturers claim that when it is once properly set, it will work with positive accuracy. The automatic pressure device in the cup operates until the last bit of oil is discharged. One of the chief advantages claimed for this cup by the manufacturers is the fact that it makes possible the supplying of semiliquid grease or heavy oil to the moving part of the chassis. These cups are sold



through dealers at 80 cents each. Proper installation requires that the oil feeding valve should be properly set at the time.

Biflex Hingedrop Bracket

A new type of rear bumper fixture, known as the Biflex Hingedrop Bracket, has been put on the market by the Biflex Corp., Waukegan, Ill. By removing the upper bolt in the face of the clamp, the bumper is permitted to swing downward through an arc of 90 degrees. It is automatically prevented from further swing by a stop, or lug, attached to the bracket. The bumper is then out of the way and acts as a step upon which a spare tire can rest when mounting or removing it from the carrier. It is compact, fitting close to the fenders, at the same time leaving enough room for cushioning action of the bumper. The bumper reaches completely across the fenders and is adaptable to the carrying of either one or two spare tires.



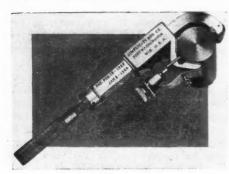
Biflex hingedrop bracket

CETTING MORE OUT of the SHOP

WINTER will soon be here, and with if the demand for Winter Service. There is abundant opportunity for the wideawake shop to maintain the flow of dollars into the cash register by doing the jobs which were described in the Winter Service Number of Motor Age last week and to keep busy during the cold months. There are constantly being offered to the automotive trade numerous articles of shop equipment designed to make the task of the repairman easier and to enable him to perform his work efficiently. The use of the right kind of equipment cannot be emphasized too strongly. Much depends upon the judicious selection of the tools you are to use in your work and the choice of the proper equipment for the shop is a matter worthy of careful consideration in order that you may be sure of having the equipment that is best suited for your particular needs. Following are some of the articles which have recently been put out:

Simplicity Crankpin Tool

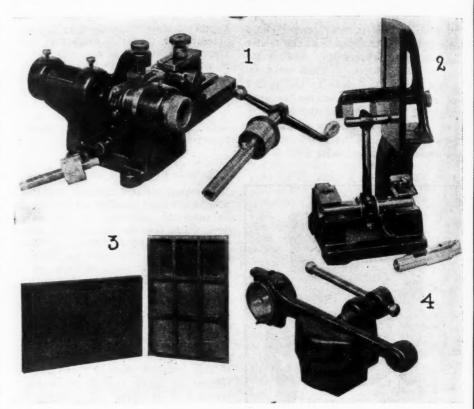
The Simplicity crank pin tool is made by the Simplicity Manufacturing Co., Port Washington, Wis. The No. 1 tool handles crankpins 1¼ to 25% in. and is furnished with eight lengths of blades ranging from 1½ to 25% in. The No. 2 tool is for pins 2 to 4 in. in diameter and the lengths of the eight blades vary from 2 to 3% in. Both are packed in oak cases and an India oil stone is furnished with each outfit. The Nos. 1 and 2 outfits sell respectively for \$50 and \$65.



Simplicity crankpin tool

Four New Tools Made by Elkhart Company

Four shop tools comprising a connecting rod reboring fixture, piston aligner, connecting rod bending and straightening device and a surface plate, have been placed on the market by the Foster-Johnson Reamer Co. of Elkhart, Ind. In the reboring fixture the pin is supported by a V in the slidable saddle which provides adjustment for length of the connecting rod. A clamp holds the small end of the rod in place. A V rest centers the rod and supports it near the bearing end. A spring lends up and down



New tools made by Foster-Johnson Reamer Co.—1: Connecting rod reboring fixture; 2: Piston aligner; 3: Surface plate; 4: Connecting rod bending and straightening vise

movement to the V rest and a set screw binds it in place. A clamp directly above the V rest finally locks the connecting rod in its correct position. sleeve is used for centering the connecting rod bearing and the boring bar is supported at both ends by bushings and carries a single point cutting tool. It is revolved by a crank and fed forward by a sixty pitch screw. The bronze feed nut is mounted in line with the boring bar. The setting of the cutting tool is done with the aid of a micrometer. The bushings taper centering sleeve and boring bar are hardened, ground and lapped. The price of the reboring fixture is \$95.00 and in ordering it is necessary to specify the diameter of the connecting rod bearing for which the machine is intended.

In the F-J piston aligner the connecting rod is held on an arbor designed on the principle of the three-point bearing. Two of the points are integral with the arbor and the third is expandable to allow for the different sizes of bearings. The connecting rod can be put on and taken off the arbor very quickly and without releasing the cap of the rod.

At right angle with the V rests is the piston aligning surface. The wrist pin aligning square is mounted on this surface and adjusted on same in a manner so that the alignment of the pin can be tested two ways with extreme accuracy.

The method of resisting the arbor with the connecting rod mounted on same is almost instantaneous, which should be appreciated at a glance.

The following five arbors are required to cover the complete range from 1¼ in. diameter to 2½ in. diameter:

Arbor A, $1\frac{1}{4}$ in.—.010 in. to 1 7/16 in. plus .010 in.

Arbor B, 1½ in.—.010 in. to 1¾ in. plus 010 in.

Arbor C, 1¾ in.—.010 in. to 2 in. plus 010 in.

Arbor D, 2 in.—.010 in. to $2\frac{1}{4}$ in. plus 010 in.

Arbor E, 21/4 in.—.010 in. to 21/2 in. plus. 010 in.

The price of the aligner with one arbor is \$38.00.

In the F-J connecting rod bending and straightening device a powerful screw action takes place mid-way between two fixed points on the base. This transmits pressure to the I-section of the rod nearest to the line of axis. The vise can either be fastened to the bench or mounted in an ordinary bench vise. It weighs seven pounds and the price is \$5.00.

The F-J surface plate is 12x18 inches and weighs forty pounds. It is strongly ribbed, well seasoned and finished with a high degree of accuracy. It can be furnished plain, machined, or hand scraped, the prices being \$15.00 and \$20.00 respectively.

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EDITORIAL

Does Industrial Health Work Pay the Employer?

To what extent is an employer responsible for the health of his employes? If he assumes responsibility for it, does the expense involved pay a sufficient return in financial profits? If it does not, is it good business? These are questions that confront the employer who looks with skepticism upon the rapid increase in industrial health work and so hesitates to establish it in his own shop or office.

To a certain extent most employers nowadays feel responsible for the health of their employes. That is, for workers who operate dangerous machines, safety devices that minimize the danger of preventable accident or illness are installed as a matter of course.

Among the chief advantages of an industrial health service is the periodical physical examination. Investigations of one large life insurance company indicates that such examinations have a potential life saving value of \$30 each. On the other hand, they are worth as much to the employer as they are to the employer for one reason at least; a worker cannot be efficiently placed unless something is known about his physical condition.

One of the insidious diseases that periodic medical examinations help to control is tuberculosis. The National Tuberculosis Association and its affiliated organizations have for a number of years been ardent supporters of the industrial health idea, as well as periodic physical examinations for both worker and employer. To carry on this work as well as other phases of the campaign, the seventeenth annual Christmas seal sale will be held throughout the country during December.

Improving Balloon Tires

Several of the large tire manufacturers are reported to have abandoned the four-ply balloon tire. They propose hereafter to make balloon tires of six plies in order to obtain greater durability. The very thin walled tires do not seem to have proved satisfactory to them after extensive tests. Their problem now is to build a thicker walled tire but at the same time retain the flexibility of the thin walled. Tire engineering has made such remarkable advances that there is no reason to doubt this objective will be attained. Progress in tire construction is one of the bright features of the automotive industry.

Let Owner Take the Risk

A MAN who has a 1919 automobile that was built right and still runs well has been figuring for some time on buying a new car. He has decided upon the car he wants, but for several months he has been postponing the purchase of it because he cannot get as high a trade-in allowance for his old car as he thinks he ought to have. In the meantime the old car continues to give him good transportation service.

This typical case illustrates a condition in the automotive industry that has shown a tendency to become quite prevalent in the last year. The old car has depreciated to a point that it cannot be sold to a new owner for a price any where near the value that the present owner puts on it. It still runs well and delivers reliable transportation to its present owner, but it is old and it could be sold to a new owner only if the price were made low enough to overcome the objection to its age.

The dealer with whom this car owner has been negotiating

knows this and he very wisely declines to tie up his profit on the new car sale in the old vehicle with uncertainty as to when it could ever be liquidated, if ever, at anything like its face value. This dealer has decided that better no sale at all than a sale without profit.

The customer is still sold on the car he wants and he has concluded to advertise his old car for sale and see if he cannot himself get more for it than the dealer will allow him. It is possible that he can do so, but certainly he is destined to learn something about used car values that may cause him to conclude that the dealer is a pretty liberal chap after all.

Encourage them to advertise their own used cars for sale.

The Maintenance Engineer

THE maintenance of automotive equipment is becoming a profession rather than a trade as reflected in proposed amendments to the constitution of the Society of Automotive Engineers. One of these relating to the objects of the Society, which formerly related to the design and construction of automobiles, may be changed so as to relate to the design, construction and utilization of automotive apparatus.

In similar fashion the requirements for member grade may be enlarged so as to take in the expert on operation and maintenance as well as the expert on design and construction.

Anyone who has observed the mechanical operations in some of the larger maintenance shops and who has seen the system needed, the business management necessary to take care of a continuous stream of vehicles, will appreciate that the superintendent of a large maintenance shop is indeed an engineer. Not only must he have technical ability of a high order but he must also have a large degree of executive ability and deserves the designation of engineer as truly as the man who figures frame stresses or superintends production.

November

In the eleventh month of the year winter is approaching. The months that follow are generally a period of good business. Money flows more freely than in the hot months of summer. The automobile industry heretofore has been somewhat an exception to that rule. In this business money has flowed more freely in summer than in winter because people used their automobiles more in warm weather than in cold weather. But now things are changing. November, instead of closing the doors of the automobile establishment, is merely opening up greater opportunity for the sale of enclosed cars, accessories for Christmas gifts, equipment for the comfort and safety of the car, and the maintenance work that puts the old car in good condition. November is indeed a month of opportunity for the automotive merchant who recognizes it.

Quality First

A REPRESENTATIVE of a large automobile organization, who is authorized to speak on the subject by his high standing as an expert and by his experience, declares that the material going into replacement parts is constantly improving. The pirate part, of inferior substance, is slipping steadily toward the edge of the picture, so he has observed. This is to hope the inferior product will continue to fade out. Quality is what the public wants and what the automotive trade, which desires to serve the public well, demands.

A. E. A. Holding Convention and Show

Delegates Gather In Chicago For Ninth Annual Assembly

Program Starting Promptly at 10 A. M. Monday Calls for Activities Through Week

CHICAGO, Nov. 10.—The ninth annual convention of the Automotive Equipment Association opened today in the annex of the Chicago Coliseum. In connection with the convention the A. E. A. is staging its sixth annual show. The initial convention session began promptly at 10 o'clock this morning with the association's traditional punctuality, being called to order by William M. Webster, A. E. A. Commissioner. There will be activities throughout the present week, final features being set for Saturday morning.

Delegates are continuing to arrive, but a fine representation is here, many having availed themselves of the opportunity to register and receive credentials before the opening day. Registration quarters were opened at Congress Hotel on Friday of last week, receiving and accommodating large numbers of A. E. A. delegates at the hotel Friday and Saturday and others at the Coliseum Sunday, to which place this department was transferred. Credential regulations are very strict and they are being enforced to the letter. Studious attention to the show is assured under the association's "coupon attendance system," which requires all members, both manufacturers and jobbers, to be present at the show at specified periods on each day after

Divisional Meetings Tuesday

The first general session of the convention, held this morning, was largely routine and introductory, nevertheless it was interesting and well attended. There was no session Monday afternoon. day will be devoted to divisional meetings, the manufacturers convening at Congress Hotel in the Gold Room and the jobbers holding forth at the Coliseum. General sessions also will be held Wednesday, Thursday and Saturday, with no convention session on Friday. A. E. A. Orchestra is on hand to furnish music previous to sessions and during show hours and on Saturday morning. Thursday night is the time set for the annual banquet and entertainment.

One of the various interesting side features will be a meeting of the Spotlight Manufacturers' Association scheduled for Tuesday evening in the Rose Room of Congress Hotel. Invitations to attend this gathering have been issued to all prominent spotlight manufacturers in the country and it is expected that the session will result in the addition of a number of names to the association's membership.

Another important feature will be a meeting sponsored by the A. E. A. and devoted to automotive advertising and sales promotion in the Florentine Room of Congress Hotel Friday morning. Speakers at this session will be Prof. A. P. Haake, chief of the Bureau of Industrial Economics, MacManus, Inc., and James H. Collins, manager of the Commercial Survey Department, of the Chilton Company.

This is the first time that the new annex of the Coliseum has been available for use and it proves a big convenience. There are 220 exhibitors in the show, a number slightly under that of last year. The entire display is shown, practically, in the main part of the Coliseum, the South Hall and the North Hall, there being no exhibits in the balcony.

The committee in charge of the show is composed of the following members: William M. Sweet, Chairman; C. F. Hodgson, Weaver Manufacturing Co.; W. A. White, Orr Iron Co.; L. F. Iverson, the Piston Ring Co.; W. T. Morris, American Chain Co.

\$100 Price Reduction Lists Overland Coupe-Sedan \$585

DETROIT, Nov. 10.—A reduction of \$100 in the price of the Overland coupesedan makes it the lowest priced fivepassenger closed model on the market. The new list is \$585. The exterior finish is now dark blue instead of black.

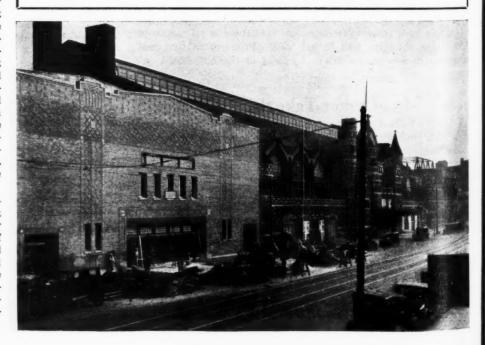
Optimistic Reports Are Made on Outlook for Rest of Year

Situation Seems More Favorable, Particularly in Sections Where Business Has Been Hampered

NEW YORK, Nov. 10.—Reports from automobile dealers throughout the country on prospects for the remaining months of the year reflect a wholesome optimism, particularly in those sections where business has been hampered for one reason or another. No area, however, expects any strong movement forward in sales that would carry the total volume beyond present conservative estimates. Farmers are buying more new cars than heretofore and may be disposed to increase their purchases of used cars of which there appears to be a surplus with many dealers.

The last quarter of the year as a usual thing is slow, buyers marking time and producers, unless planning to increase output to prepare for spring demand, keeping to a like pace. One large automobile producing plant will close for a few days this month to take inventory but the majority will continue operating without interruption, although not maintaining high schedules, until the latter part of December when there will be a more or less cessation or interruption of operations to place plants in readiness for 1925 demand. In the last two months (Continued on page 34)

Exterior of Chicago Coliseum and New Annex, at Left, Which Houses A. E. A. Convention and Show



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List of Exhibitors at Show of Automotive Equipment Association, Chicago Coliseum, Nov. 10-15, 1924

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Name Address	
Athertson & CompanySioux City, Ia.	
A. C. Spark Plug CoFlint, Mich.	
American Hammered Piston Ring Co	
Appleton Electric CoChicago, Ill.	1
American Grinder Mfg. Co	1
Atlas Specialty Mfg. CoChicago, Ill.	
American Chain CoBridgeport, Conn.]
Name Albertson & Company Sioux City, Ia. A. C. Spark Plug CoFlint, Mich. American Hammered Piston Ring Co Appleton Electric CoChicago, Ill. American Grinder Mfg. CoMilwaukee, Wis. Atlas Specialty Mfg. CoChicago, Ill. American Chain CoBridgeport, Conn. American Autoparts CoDetroit, Mich. Automotive Gear Works, Inc Richmond, Ind.	,
Richmond, Ind.	
Automotive Gear Works, Inte. Richmond, Ind. Advance Automobile Acc. Corp. Chicago, Ill. American Bosch Magneto Corp. Springfield Mass.	
American Bosch Magneto Corp	1
Mass. Bacine, Wis.	j
Apex Electric Mfg. CoChicago, Ill.	
American Bosch Magneto Corp	
	1
A. E. A. Catalogue Department Chicago, III. Bussman Mfg. Co	
Bussman Mfg. CoSt. Louis, Mo.	
Burgess-Norton Mfg. CoGeneva, Ill.	-
Black & Decker Mfg. CoBaltimore, Md.	
Bastian-Blessing Mfg. CoChicago, Ill.	
Bonney Forge & Tool Works	
Badger Mfg. CorpMilwaukee, Wis.	
Boyce & Veeder Corporation	
Brunner Mfg. Co	
Bunting Brass & Bronze CoToledo, Ohio	
Buckeye Brass & Mfg. Co., Cleveland, Ohio	
Bell Mfg. Co. (Division of Northern In-	
dustrial Chemical Co.)Boston, Mass.	
Portland, Ind.	
Crescent Tool CoJamestown, N. Y.	
Cooper Mfg. Co. Marshalltown, Ia.	
Curtis Pneumatic Mehy. Co. St. Louis, Mo.	
Columbus-McKinnon Chain Co	
Columbus, O.	
Bastian-Blessing Mfg. Co. Chicago, III. Bonney Forge & Tool Works. Allentown, Pa. Badger Mfg. Corp. Milwaukee, Wis. Boyce & Veeder Corporation. Long Island City, N. Y. Bunting Brass & Bronze Co. Toledo, Ohio Benzer Corporation. Brooklyn, N. Y. Buckeye Brass & Mfg. Co. Cleveland, Ohio Bell Mfg. Co. (Division of Northern Industrial Chemical Co.). Boston, Mass. Bimel Spoke & Auto Wheel Co. Portland, Ind. Crescent Tool Co. Jamestown, N. Y. Corcoran Mfg. Co. Cincinnati, Ohio Cooper Mfg. Co. Marshalltown, In. Curtis Pneumatic Mchy. Co. St. Louis, Mo. Cincinnati-Victor Co. Cincinnati, Mo. Cincinnati-Victor Co. Cincinnati, Ohio Columbus-McKinnon Chain Co. Columbus, O. Champion Blower & Forge Co. Continental Rubber Works. Erie, Pa. Centinental Brass & Fixture Co. Springfield, O. Continental Brass & Fixture Co. Springfield, O.	
Continental Rubber WorksErie, Pa.	
Central Brass & Fixture CoSpringfield, O. Continental Piston Ring Co	
Memphis, Tenn.	
Canedy-Otto Mfg. Co., Chicago Heights, Ill.	
Champion Spark Plug CoToledo, Ohio	
Crawford Mfg. CoRichmond, Va.	
Culver-Stearns Mfg. Co Worcester, Mass.	
Cuno Engineering CorpMeriden, Conn.	
Davies-Young Soap Co Dayton, Ohio	
Central Brass & Fixture CoSpringfield, O. Continental Piston Ring Co	
Durkee-Atwood CoMinneapolis, Minn.	
Detroit Motor Valve Co Detroit, Mich.	
E. Edelmann & CoChicago, Ill.	
Elite Mfg. Co. Ashland, Ohio	
Edison Lamp Works of General Elec-	
The Fulton Company Milwaukee, Wis.	
Forest Electric CoNewark, N. J.	
Fitzgerald Mfg. CoTorrington, Conn. French Bottery & Carbon Co.	
Delta Electric Co	
W. D. Foreman	
Fararn-Old Co	
Fleming Machine CoWorcester, Mass.	
Gates Rubber Co. Denver, Colo.	
Gates Rubber Co Denver, Colo- Gemeo Mfg. Co Milwaukee, Wis. Gilfillan Bros., Inc Los Angeles, Cal.	
Glabe Mar Company Bottle Creek Mich	
Globe Mfg. CompanyBattle Creek, Mich. Goodrich-Lenhart Mfg. CoHamburg. Pa	
Goodrich-Lenhart Mfg, CoHamburg, Pa The Greb CompanyBoston, Mass. L. H. Gilmer CoTacony, Philadelphia, Pa	
L. H. Gilmer CoTacony, Philadelphia, Pa.	
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Name Globe Machine & Stampi	Address ng Company
Globe Machine & Stampi Graton & Knight Mfg. C	Cleveland, Ohio
General Automotive Corp.	Chicago, Ill.
Gill Manufacturing Co	Chicago, Ill. Auburn, Ind.
Ernest Holmes Company.	. mastings, mich.
Gladiator Mfg. Co. Hastings Manufacturing (Ernest Holmes Company. Chall-Thompson Co. Hall-Thompson Co. Harvey Spring & Forging L. P. Halladay Company. C, M. Hall Lamp Company. Hill Pump Valve Co. Haines Mfg. Corp. Indianapolis Pump & Tu Imperial Brass Mfg. Co. Jefferson Electric Mfg. Co. Jefferson Electric Mfg. Co. Johnson Bronze Company. Judd & Leland Mfg. Co. Clifto K-D Lamp Company. Kokomo Automotive Mfg K-W Ignition Corporation	
Indianapolis Pump & Tu	ndianapolis, Ind.
Imperial Brass Mfg. Co Jefferson Electric Mfg. C Johns-Manville, Inc Johnson Bronze Company. Judd & Leland Mfg. Co Cliffo	Chicago, 111. oChicago, 111New York, N. YNew Castle, Pa.
K-D Lamp Company Kokomo Automotive Mfg	. Co
K-W Ignition Corporation	Cleveland, Ohio
K-W Ignition Corporation King Manufacturing Corp Kant Rust Products Corp Kales Stamping Company Kellogg Manufacturing C	Rahway, N. J. Detroit, Mich.
Kellogg Manufacturing C Keystone Reamer & Too	Rochester, N. Y.
Keystone Reamer & Too Klaxon Company Kennedy Manufacturing Las-Stik Patch Mfg, Co LeCompte Manufacturing Lake Erie Metal Product	Anderson, Ind.
Las-Stik Patch Mfg. Co LeCompte Manufacturing	Hamilton, Ohio
Lake Erie Metal Product	s Co
Laminated Shim Compan	y
Laminated Shim Compan Long I David Lupton's Sons Co. Lincoln Products Co.	Detroit, Mich. Chicago, Ill.
Multibestos Company Marquette Mfg. Co	Walpole, Mass. St. Paul. Minn.
Manley Manufacturing C Monroe Auto Equipment	oYork, Pa. CoMonroe, Mich.
David Lupton's Sons Co. Lincoln Products Co. Lyon Metallic Mfg. Co. Multibestos Company. Marquette Mfg. Co. Manley Manufacturing C Monroe Auto Equipment Mutual Wheel Company. Miller Lock Company. Milwaukee Motor Produc Metal Stamping Co. Long Metal Specialties Mfg. Co. Mooto Meter Company, II Long Modine Manufacturing C Mosler Metal Products C Frank Mossberg Compan MeCord Radiator & Mfg. McCord Radiator & Mfg.	Moline, Ill. Philadelphia, Pa.
Metal Stamping Co. Long	Milwaukee, Wis. Island City, N. Y.
Metal Specialties Mfg. Co Moto Meter Company, II	chiengo, Ill.
Modine Manufacturing C Mosler Metal Products	oRacine, Wis.
Frank Mossberg Compan	yAttleboro, Mass.
MeQuay-Norris Mfg. Co	St. Louis, Mo.
McCord Radiator & Mfg. McQuay-Norris Mfg. Co McAdams Co., J. CLon No-Leak-O Piston Ring	Company
National Standard Compa	inyNiles, Mich.
North Western Chemical (Nims Pump Company National Carbon Compan Long North Bros. Mfg. Co New Era Spring & Spec	CoMarietta, Ohio Stockton, Cal.
North Bros. Mfg. Co New Era Spring & Spec	Philadelphia, Pa.
Norlipp CoGr	
The Ohio Parts Co	Syracuse, N. Y. Cincinnati, Ohio
New Era Spring & Spec Gr Norlipp Co	Warren, Ohio Abingdon, Ill.
- Chastvania Fiston Kin	Cleveland, Ohio

Name Address
Polson Rubber CompanyCleveland, Ohio N. A. Petry Co., IncPhiladelphia, Pa.
N. A. Petry Co., Inc
Phinney-Walker Co., Inc New York, N. Y.
The G. Piel Company, IncLong Island City, N. Y.
Long Island City, N. Y. Wm. E. Pratt Mfg. CoChicago, Ill. Perfection Gear CompanyChicago, Ill.
Motor Age 11-10 RAPP
Price-Hollister Co., IncRockford, Ill. Raybestos CompanyBridgeport, Conn.
Reliance Mig. CoMassillon, Uhio
Russell Mig. Co
CoNewark, N. J.
Romort Manufacturing CoOakfleld, Wis. G. A. Roth Manufacturing Co
Frank Rose Manufacturing Co
Rollaway Motor CompanyToledo, Ohio Stone Manufacturing CoChicago, Ill.
The Simoniz CompanyChicago, Ill.
Sterling Manufacturing Co
Stiles Manufacturing CoSt. Louis, Mo.
Splitdorf Electrical CoNewark, N. J.
Stiles Manufacturing Co
Spencer Smith Machine CoHowell, Mich.
S. & M. Lamp Co., IncLos Angeles, Cal. A. Schrader's Son, IncBrooklyn, N. Y.
Southern Automotive DealerAtlanta, Ga. E. M. Smith CompanyLos Angeles, Cal.
Smith & Hemenway Co., Inc.
F. W. Stewart Mfg. CorpChicago, Ill.
Storm Manufacturing Co
South Bend Lathe Works
Stevens & CompanyNew York, N. Y.
Tuthill Spring Co
Thomas Auto Top Co
Thompson-Neaylon Mfg. CoChicago, Ill. Toledo Steel Products CoToledo, Ohio
Chas. O. Tingley & CoRahway, N. J.
Thomas Auto Top Co
Thermoid Rubber CoTrenton, N. J. Trainor National Spring Co
New Castle, Ind.
Timing Gears CorporationChicago, Ill. Trico Products CorporationBuffalo, N. Y.
The Trexler Co. of America
W. H. Thomas Mfg. Co Spencer, Ia. U. S. Air Compressor Co Cleveland, Ohio United States Asbestos Co Manheim, Pa. Van Cleef Bros Chicayo. Ill.
United States Asbestos CoManheim, Pa.
Van Cleef Bros
Voorhees Rubber Mfg. Co
The Vellumoid CompanyBoston, Mass.
Van Norman Mach, Tool Co
The Vichek Tool Company. Cleveland, Ohio Walker Manufacturing CoRacine, Wis.
Walker Manufacturing CoRacine, Wis. Weaver Manufacturing CoSpringfield, Ill.
Williams Bros. Aircraft Corp
Joseph Weidenhoff
J. H. Williams & CompanyBuffalo, N. Y. Walden-Worcester, Inc. Worcester, Mass
San Francisco, Cal. Joseph Weidenhoff
VI CIIS MAINIMACTINE COMMISSIONISSIONISSIONIS
Westinghouse Lamp CoNew York, N. Y.
Warner-Patterson CompanyChicago, Ill. Whitaker Battery Supply Co
Kansas City, Mo.
Wright Mfg. CoLisbon, Ohio Wood-Imes Mfg. CoMinneapolis, Minn.

H. C. S. GIVES NEW TAXI LIST

INDIANAPOLIS, Nov. 10.—The H. C. S. Cab Manufacturing Co. announces the list of new H. C. S. taxicab as \$1880 f.o.b. factory. It is planned to market the product through automobile dealers and also by special taxicab selling companies in the larger cities.

APPOINTED BY ROLLIN

Motor Sales Company has been appointed dealer for Rollin in Rochester, N. Y.

The company was recently organized with John A. Otto as president and William B. Loomis as sales and service manager.

CLEVELAN have been for state, authorise from \$50,000 Cadillac Co.

H. Marlatt a respectively.

CAPITAL INCREASED

"X" Laboratories.....New York, N. Y.

CLEVELAND, Ohio, Nov. 10.—Papers have been filed with the secretary of state, authorizing the increase in capital from \$50,000 to \$100,000 of the Towell Cadillac Co. T. H. Towell and William H. Marlatt are president and secretary, respectively.

Dort Liquidation Is Now Said To Be Definitely Under Way

Bids Asked on General Service Business of Company Which Ran \$2,000,000 Last Year

DETROIT, Nov. 7.—Proceeding with the liquidation of Dort Motor Car Co., announcements have been sent out this week to leading parts supply companies inviting bills on the general service business of the company. The liquidation of the assets of the Dort company, in process for several months, has never been formally announced to this time owing to the possibility of reorganization of the company as a car manufacturing entity.

The sale of the service business of the company will follow a consideration of bids from the parts companies, these bids to be in by Nov. 10. If the bids do not reach the proportions which the Dort company considers equitable, a company will be organized among officers of the former company to continue the parts business. This will be entirely separate from the general liquidation proceedings.

85,000 Or More Cars In Service

According to J. Dallas Dort, president, who is directing the liquidation personally there are from 85,000 to 100,000 Dort cars in service, the parts business on which ran \$2,000,000 in 1923. This business will continue for at least several years, said Mr. Dort and the handling of it constitutes a nice little business in itself, which he will take over with some of his associates, if the bid from outside companies is low.

Although the liquidation has been going on for some time, Mr. Dort says there still is some hundreds of thousands of dollars worth of factory equipment independent of the factory buildings and other properties. These will continue to be sold as satisfactory opportunities present but the liquidation may continue for several months or longer. The conditions of the liquidation are such that good market opportunities may be awaited on all the assets and holdings.

The Dort company, however, is now definitely out of the car manufacturing field, though up to the very recent past there was possibility of a reorganization with some well known figures in the industry participating. It is understood that if these plans had matured, Mr. Dort would have turned over a large part of his holdings in the former company, for stock in the new one. The time in which action on the new company was to take place expired last Saturday and the liquidation is now formally declared to be under way.

No Manufacturing Supplies

There are no cars of any kind in the company's hands nor any material for the manufacture of cars. All material has been worked off and all cars sold. A considerable part of the material was

made into parts and sold to many former Dort dealers who stocked to take care of the requirements of their former Dort customers. The general service business will take care of replacements both with former dealers and direct with owners.

The company has several groups of manufacturing buildings, one group in the center of Flint, a part of which has been taken over for warehouse purposes by other business of the city. The remaining buildings of this group are offered for warehouse or wholesale business sites. The new factory property is on the outskirts of the city, a modern plant erected several years ago but occupied only in part for car building purposes. The former body plant of the company at Kalamazoo was sold several years ago.

Mr. Dort declares that the liquidation of the property will require his continued personal attention for at least several months to come, after which time he will consider probably some further activity in the industry. He has many personal interests, he said, to any of which he may confine his attentions. "I'm only a kid yet," he declared, "and I'm liable to do any of a number of things except retire from active business."

OPTIMISTIC REPORTS ARE MADE ON OUTLOOK REST OF YEAR

(Continued from page 32)

a year ago, output of cars and trucks totaled 616,197.

Little comparison, however, can be made between this year's and last year's activities due to the great difference in conditions. Output in 1923 took care of buyers who had not been in the market for several years and operations were kept at a high point almost continuously throughout the year to meet this demand.

While the output of the greater part of last year was readily absorbed and a shortage of cars was reported during some of the period, much of it toward the end of the twelve months went into storage either in dealer's salesrooms or in the manufacturer's warehouses to forestall the possibility of a shortage in the following spring.

Production this year was maintained at a high figure the first five months, a decline settling in when it became apparent that the stemmed demand of the year before had been well taken care of and the anticipated spring rush was not forthcoming at the time expected. The industry for the last five months has followed a conservative gait, manufacturers watching closely the trend in the sales field before augmenting their programs. Notwithstanding changed conditions in the two years, output for the ten months of this year has fallen only 286,422 below the total reported for the corresponding period a year ago and practically all this output has been absorbed. There are comparatively no reserve stocks in the hands of either dealer or maker.

October's Production of Cars and Trucks in Slight Decline

N. A. C. C. Estimates Output for Last Month As 1.2 Per Cent Under September

NEW YORK, Nov. 4.—An estimate based on shipping returns, made by the National Automobile Chamber of Commerce, places October production of cars and trucks at 284,514. This is 1.2 per cent below September's revised figures and 11.5 per cent below October of last year when the total of 365,162 was reported.

This total is not based on the full month's reports, the estimate having been made with the last few days missing.

For the ten months period production has totaled 3,112,349 as against the record breaking count of 3,357,131 in the same period last year, a drop of but 7 per cent.

There has been little variation in production in the last three months in which 851.698 cars and trucks have been turned out. Comparing it with the same stretch last year there is a difference of 186,277, for in August, September and October, 1923, the industry was running at its fastest pace, the count being 1,037,975. This time the manufacturers are going slower, taught to be cautious by the overstocking that took place last spring. There is no reason to believe that there will be much deviation from this production pace in the remaining months of the year and, going by this, the industry expects that the year's total will be approximately 3,600,000.

The wonderful fall weather general throughout the country is believed to be responsible for the big number of cars and trucks being turned out. Cheated of many sales by the miserable spring which upset all calculations, manufacturers and dealers now find unexpected business on all sides and give the Indian summer due credit for it.

Syracuse New Car Sales Run Five Per Cent Ahead of 1923

SYRACUSE, N. Y., Nov. 10.—New car sales in this city are about five per cent greater than for the same time last year, according to figures announced by the Syracuse Automobile Dealers Association.

During the first nine months, local dealers sold 7,278 new passenger cars compared with 6,922 for the first nine months of 1923. Commercial car sales for the same period were 992 for this year and 934 for a year ago.

In the sale of passenger cars only during the months of May and June were decreased from the previous year shown, and the same months in commercial car sales showed losses.

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National Standard Parts Ass'n Now Permanently Organized

A. T. Haugh of Buffalo Elected First President at Enthusiastic Convention in Chicago

CHICAGO, Nov. 10.—Through action taken at a three-day convention which closed today at Hotel La Salle, Chicago, the National Standard Parts Association has assumed the status of a permanent organization and as such will function in the future. The executive committee named at the preliminary gathering in Detroit last May now transfers promotion responsibilities to the hands of regularly elected officers and a board of directors who, with the assistance of standing committees, and the association secretary will guide further activities.

While much of the Chicago convention necessarily was devoted to perfection of organization and charting the association's course for the coming year discussions of business problems common to both manufacturers and jobbers developed many valuable suggestions for practical application in the merchandising of standard brand products. Frankness and enthusiasm were outstanding characteristics of the various sessions. Those interested in the welfare of the organization could not have asked for a finer allaround demonstration of the spirit of cooperation. Manufacturers were there and jobbers were there, but with thoughts and purposes that were obviously par-

Haugh Named President

A. T. Haugh, of Buffalo, chairman of the old executive committee, presided at the earlier sessions as chairman and later by reason of his election to the presidency. Mr. Haugh is a manufacturer. His name was placed in nomination by W. D. Patterson, a jobber, and his election was declared by acclamation. Mr. Patterson was elected vice-president by acclamation. The full list of officers, directors and standing committees selected is as follows:

President, A. T. Haugh, King Manufacturing Co., Buffalo.

Vice-president, W. D. Patterson, Patterson Parts, Inc., San Francisco.

Directors (Manufacturers)

- C. W. Moffett (three years), Warren Gear Products Co., Warren, Pa.
- T. B. Blakiston (two years), American Hammered Piston Ring Co., Baltimore.
- E. D. Main (two years), U. S. Bearings Co., Indianapolis.
- H. I. Walton (one year), Continental Piston Ring Co., Memphis.
- .C. J. Pilliod (one year), Cleveland Piston Pin & Bolt Co., Cleveland, O.

Directors (Jobbers)

- $\ensuremath{\mathrm{W}}.$ T. Mills (three years), Auto Parts Co., St. Louis.
- Sim T. Mee (two years), Mee-Oakes Co., Oklahoma City.
- R. M. Schnore (two years), Southern Bearing Co., Atlanta.

- C. J. Peterson (one year), P-D Auto Parts, Inc., Meriden, Conn.
- V. W. Olson (one year), Automotive Service Co., St. Paul, Minn.

The president and vice-president are three year members of the board.

Finance Committee

A. T. Haugh, T. B. Blakiston and R. M. Schnore.

Membership Committee

R. M. Schnore, W. D. Patterson, V. W. Olsen, E. D. Main, C. J. Pilliod, A. T. Haugh.

Merchandising and Standardization Committee

T. B. Blakiston, H. L. Walton, C. W. Moffett, Sim T. Mee, C. J. Peterson, W. T. Mills.

An appropriation of \$5,000 has been set aside for the Merchandising and Standardization Committee, of which Mr. Blakiston is chairman, for use in a program which promises to be a very important feature of the coming year's work. Part of its service will be in recommendations to jobbers of better methods in the conduct and systematization of business, accounting, handling the problem of obsolete parts and general facilities for improved merchandising. This committee hopes to develop many ideas wherein it can render valuable service to the members as it proceeds with the study of opportunities.

Adopt Code on Practices

A code of Fair Trade Practices as approved in September by the executive committee was adopted, with a few eliminations, by the convention.

Permanent headquarters of the association will be established in Chicago the first of the year, at which time C. B. Fraser, executive secretary, will move from Buffalo, where temporary offices are located at present. It is planned to issue a monthly newspaper containing items of particular interest to the association members and describing association activities. The secretary also will issue information bulletins at intervals. An annual show will be held at the time of the annual convention, the first such exhibition being set for November, 1925. The show will feature replacement parts, garage equipment and tools.

The board of directors will meet in February and July as well as at convention time. Nineteen applications for membership were accepted during the Chicago convention.

REO OFFERS NEW MODEL

DETROIT, Nov. 10.—The Reo Motor Car Company has brought out a new five-passenger closed model which will be known as the Twentieth Anniversary Sedan. The new body is mounted on the standard six cylinder passenger car chassis and is priced at \$1595. It is a four-door type, finished in dark blue with white striping and upholstery to harmonize with the exterior color. Equipment includes balloon tires, disc wheels, one-piece windshield, windshield wiper, rear view mirror, parking lamps, dome light and sun visor.

R & V Motor Company, of Moline, Winds Up Operations

Service Department of Automobile Production Plant Sold to Especially Organized Concern

EAST MOLINE, Ill., Nov. 8.—Final operations of the R & V Motor Company of this city closed Oct. 31, and assets of the firm have been placed in charge of the Moline Body Corporation of Moline, one of the largest creditors.

A large part of the force employed at the motor company will now be employed by the body corporation, which has had an increase in operations within the past six months.

H. A. Holder, who has been president of the R & V Company since its reorganization several years ago, will return to the association of Richardson and Hill, Boston bankers.

Service department of the company was sold to the Krights Motor Parts Company of East Moine which was recently organized for that purpose. Dan Smith, for many years a mechanic of the R & V Company, is in charge of the service company.

Closing of the factory marks the passing of an industry which flourished for many years in the manufacture of gasoline engines. Later operations were turned to the R & V Knight automobile. The company was originally organized by W. H. Vandervoort and O. J. Root.

Industrial Acceptance Corp. to Finance Studebaker Sales

NEW YORK, Nov. 8.—The Industrial Acceptance Corp. has been formed to take over and continue the business of financing sales of Studebaker cars from factory to dealer and from dealer to consumer. In addition to its wholesale and retail plan, a modified retail plan has been worked out to apply to special conditions and requirements of the farmer.

Arthur J. Morris, who began this business more than five years ago, will be president, and the staff that has been associated with him will continue the activities of the new corporation. Corporation activities will be conducted along lines followed by other large motor acceptance organizations. At the present time financing of Studebaker automobiles is at the rate of 60,000 cars a year. The volume of business to be taken over by the new company amounted to more than \$62,000,000 in the year ended July 31, 1924. Transactions financed in the preceding year exceeded \$26,000,000.

Acceptances of dealers, of which all except a small percentage mature in three months or more, are issued for not more than 80 per cent of the wholesale price of the cars, and the notes of retail purchasers, which mature in installments over not more than 12 months, are issued for not more than two-thirds of the cost of the cars.

Win for Cooper on Turkey Day Would Give Him Coveted Title

Second Place at Charlotte Makes Lead Which Puts Earl in Sight of Crown

FRANKLIN, Pa., Nov. 10.—Victory for Earl Cooper in the final speedway meet of the season, billed at Los Angeles on Thanksgiving will give him the coveted title of champion race driver of the year, awarded by the Contest Board of the American Automobile Association. Second place at Charlotte Oct. 25 put Cooper within sight of the lead, while the 500 points which will be awarded at Los Angeles would be sufficient for him to get to the top.

The official standing in the championship title battle as announced by Chairman Richard Kennerdell is as follows:

mai	n Richar	d Kennerden is as i	ollows:
			Points
1.	Murphy	***************************************	1595
2.	Cooper	***************************************	1240
3.	Milton		961
4.	Hill		714
5.	Comer		645
6.	Corum	***************************************	570
7.	Fengler	***************************************	563
8.	Hartz		406
9.	Shaffer	***************************************	405
10.	Wonderl	ich	285

12.	De Paole	0	193
13.	McDono	gh	166
14.	Hearne		33
15.	Vail		34
16.	Ansterb	erg	25
		ıst	

MORE DEALERS FOR FLINT

FLINT, Mich., Nov. 8.—The Flint Motor Company announces appointment of the following new dealers:

Grant Avenue Garage, Duquesne, Pa.; Star Auto Sales Co., Merced, Cal.; Christopher Bros., Reddick, Ill.; Glasglow Brothers, Plainfield, Ill.; Crawford Square Motor Sales Co., 3252 Milwaukee, Ave., Chicago, Ill.; Glencoe Battery & Ignition Co. 332 Park Ave., Glencoe, Ill.; Illini Motor Co., Springfield, Ill.; Knapp Motor Sales Co. Corp., Inc., Bloomfield, N. J.; Henry C. Burdick, Groton, Conn.; Elm Park Motor Co., Inc., 234 Park Ave., Worcester, Mass; H. A. Chapman, Glouster, O.; H. J. Wirth, Marietta, O.; Salem Flint Co., 16 Penn St., Salem, O.; Sullivan Flint Co., Sullivan, Ind.; Central Utah Motor Co., Richfield, Utah; Service Garage, Helper, Utah; M. S. Gould, 416 E. Butler St., Adrian, Mich.; T. J. Galinsky Motor Car Co., Carlinville, T. J. Galinsky Motor Car Co., Carlinville, Simmons Motor Co. Ottumwa, Ia.; S. Beneventi, Granger, Ia.; Conkey Motor Co., Wichita, Kan.; Sengel Motor Co., 108 N. 10th St., Fort Smith. Ark.; White Front Garage, Leavenworth, Kan.; Smith Machine Co., Warrensburg, Mo.; H. L. Jaqueth & Co., Galena, Kan.; Long & Barnett, Rosedale, Kan.; Allen Motor Co., LaCrosse Kan.; Belknap Bros. & Wiles, Nevada, Mo.;

Memorial to Zborowski Will Be Erected on Monza Track Near Site of Driver's Death

Investigation Reveals That Noted Racer's Fatal Accident Was Due to Greasy Sopt on Speedway and Temporary Brake Failure

PARIS, Oct. 24 (By Mail).—The combination of a greasy patch on the track and the temporary failure of the front wheel brakes to release appear to be the causes which led to the death of Count L. Zborowski, when racing on Monza track in the Italian Grand Prix. Some of the supercharged engines shot a considerable amount of oil out of their exhausts when accelerating and one spot was formed on a long easy curve in the woods. Zborowski ran onto this patch, and with the failure of his front brakes to release he first struck a tree on the outside of the course, thus throwing his mechanic clear, and then collided with a second tree on the inside. The

steering column pierced his chest and his skull was crushed in.

Zborowski was one of the most enthusiastic supporters of motor racing in Europe. He maintained a large number of racing cars and took part in international events on various makes of cars entirely at his own expense. To perpetuate his memory, it has been decided, on the initiative of Prince de Cystria and E. A. D. Eldridge to open a subscription for the erection of a memorial on Monza track near the place where he was killed. The Spanish Automobile Club, which runs an annual road race near Barcelona, has decided to make the chief prize the Zborowski Trophy. This race will be run on May 24, 1925.

TRADE AGENCIES

SALT LAKE CITY, Utah, Nov. 7.—The Ford and Lincoln agency relinquished by the Covey-Ballard Motor Co. in favor of the Nash, has been taken over by L. O. Naylor Co., 47 West Fourth South street, Nash agents, in other words, an exchange of agencies has been effected. The Naylor company has as its head L. O. Naylor, who has been in the automobile business for ten years.

BALLOONS FOR TAXIS

PARIS, Nov. 8.—Balloon tires are being fitted to 5200 Paris taxicabs operated by the Compagnie Autoplace and the Cie Generale des Voitures de Place, the two largest concerns of their kind in the French capital.

Wanted: Silent Motorcycle

WASHINGTON, Nov. 10 .- Great Britain is in search of a "silent" motorcycle, according to a report made to the automotive division of the U.S. Department of Commerce. Manufacturers, riders and the general public, have organized a silencer trial to be held Nov. 19 at the Brooklands Race Course, near London, where competing machines with various kinds of silencer devices are to be tried out. The test is being conducted by the British Auto-Cycle Union in connection with the annual motorcycle show in London. Substantial prizes have been offered for the nearest approach to a silent motorcycle.

Questionnaire Replies Show Brisk Pick-Up in Tire Sales

NEW YORK, Nov. 8.—A brisk pick-up in the tire business is indicated in the summary of replies to the questionnaire sent out by the Rubber Association of America covering operations in the third quarter. With practically all of the big producers but Firestone reporting, the statistics show that the value of shipments, of automotive products in the third quarter was \$170,603,000 in comparison with \$139,899,000 in the second quarter and \$130,562,000 in the corresponding period last year.

Tire shipments in the third quarter were valued at \$132,316,000 as against \$109,903,000 in the second quarter and \$100,707,000 in the third period last year. Tire shipments were \$25,549,000 and solids \$7,457,000.

The inventory of crude rubber shows a grand total of 49,645,000 long tons on hand on Sept. 30 and 50,760,000 long tons after

TO BUILD THIS WINTER

COLUMBUS, Ohio, Nov. 8.—O. C. Belt, head of the Belt-Franklin Auto Co., central Ohio distributors for the Franklin, announces that construction of the new sales room, service station and offices for that agency on the new site at Broad and Ninth streets will start some time during the winter. It is planned to build a \$150,000 structure.

TAKE ON MAXWELL-CHRYSLER

HARTFORD, Conn., No. 7.—Hall & Maher, Middletown, Conn., have taken over the Maxwell and Chrysler formerly handled by Charles Masin, selling under the John P. Nielson & Sons Co., 86 Maple avenue, Hartford, Conn.

Sales Pick Up Around Boston **But Require Harder Efforts**

Reduced Prices on New 1924 Models Have Effect of Slowing Used Car Movement

BOSTON, Nov. 10.-Motor car sales in the Boston district have begun to show an improvement. Distributors agree that there are sales to be had, but it means harder work to get them, and it costs more both in additional salesmen and in some cases on trades. October sales have averaged about as good as September, but for some reason not quite as good as August. The windup of election had its effect.

Registration figures in Massachusetts show that July, August and September increased the quota over the same months a year ago, each succeeding month showing more cars listed. When it is recalled that both April and June were behind the same months of 1923 the climb during the summer is encouraging.

Used cars have not been moving very fast due to the fact that a number of new 1924 cars have been put on the market at reduced prices. By concentrated advertising these have been moving well, but they had a retarding effect on new car sales here and there.

SHONTZ HOLDS CONVENTION

NEW YORK, Nov. 10 .- More than 200 battery dealers and car service men attended the sales convention and dinner given by the H. B. Shontz Co., Inc., New York central distributor for USL batteries. The gathering was for the purpose of spurring on the dealers, better merchandising and more profits and in-

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41 Per Cent Should Buy Specs, Huh?

MONTREAL, Can., Nov. 8 .- At the recent annual convention of the Quebec Association of Optometrists held in this city the vision of motorists was discussed by a speaker who had before him figures obtained in sight tests at the Canadian National Exhibition held in Toronto. One section showed that 41 per cent were not able to pass a standard just a little below what the optometrists use for correction and in one instance a man who for some time had been driving a car was found to have only 25 per cent of normal vision. The need for eye tests before motorists secure a driving license was urged by the speaker, who pointed out that this precaution was even more essential for the man driving amongst traffic than for the railway engineer who must submit to a cidently marked the seventh anniversary of the incorporation of the Shontz Co. Mr. Shontz acted as master of ceremonies and a number of addresses were made by men prominent in the manufacture and distribution of USL batteries. These included C. O. Miniger, D. H. Kelly and H. A. Harvey, respectively president, vicepresident and general manager and service manager of the U.S. Light and Heat W. E. Traphagen, New York Branch Manager of United Motors, also was a speaker.

88.5 Per Cent of Franklin Production Enclosed Models

SYRACUSE, N. Y., Nov. 10 .- For the first ten months of this year 88.5 per cent of the production of the Franklin Automobile Co. has been closed cars. Sedans represent 62 per cent. This compares with 80 per cent of the Franklin output being closed in 1923.

PLAN INCREASED OUTPUT

KOKOMO, Ind., Nov. 8.—After a period of nine months continuous night and day production, plans were laid for increased production next year at the semi-annual sales conference of the Kokomo Rubber Co. held recently. Additional plant equipment is being installed that will enlarge the capacity of the factory at least onethird, according to Randolph Mitchell. general manager. Mr. Mitchell stated that the first three quarters of 1924 have been the best, both in point of volume and profit, that the concern has ever

The conference was attended by all the company's wholesale representatives, with Carl B. Gibson, sales manager, in charge. Two business sessions were held, and there was diversion. A gradual betterment in tire sales was reported by the salesmen. While dealer purchasing is still on the "hand-to-mouth" basis, they stated that it is consistent and gaining in volume. Dating business is starting much stronger than last winter.

PLANS NOT ABANDONED

DETROIT, Nov. 7.—Reports from Philadelphia that the Ford Motor Co. has abandoned the idea of erecting a huge assembly plant in southwest Philadelphia are answered by the Ford company with the statement that its plans remain as before; that it is seeking a site for the future plant, nothing having been closed. The present plant will be continued indefinitely.

PLAN \$90,000 BUILDING

GREEN BAY, Wis., Nov. 8.—The Fox River Motor Car Co., Green Bay, Wis., Ford dealer, will build a \$90,000 sales and service building, three stories, 80x160 ft., to be ready about Feb. 1. The present quarters are at 417 Main street.

They Got There and Got There Fast

WASHINGTON, Nov. 8 .- The futility of trying to keep a good man down was demonstrated when officials of the Dayton Automobile Club called the local office of the American Automobile Association one morning recently and asked for a conference at 2 o'clock that same afternoon.

The Dayton delegation was told that the A. A. A. officials would be glad to see it and wanted to know just when it would arrive. "In four hours," was the reply, and at 1:30 an airplane landed at Bolling Field carrying I. G. Kumler, field secretary of the Dayton Club and Paul A. Ackerman, assistant manager. Before 2 o'clock they were being greeted by John Hope, assistant general manager of the A. A. A. at the Association's headquarters.

October Best Sales Month In History For Nash Company

KENOSHA, Wis., Nov. 8.—The Nash Motors Company, Kenosha, set a new sales record in October, according to E. H. McCarty, general sales manager. Tabulations at the close of the month, says Mr. McCarty, revealed October to have been the best month in the organization's history. In view of the season's tendency to slackness in the automotive industry Nash executives are very well pleased with the tone of business. It is said that Nash has been oversold continuously since the 1925 models were brought out. A check on 15 cities, according to Mr. McCarty's statement showed the bonafide unfilled retail orders for new models, specifying immediate delivery, to be 1,265

"An analysis of the proportionate open and enclosed car sales during October," said Mr. McCarty throws an interesting sidelight on the situation. October enclosed car business was the biggest we ever had. And the October total plus the September enclosed car sales ran well past the combined enclosed car sales of the three next largest months in the history of Nash. November shows so far not the slightest hint of slackening in

the demand."

ENTERED IN ASCOT RACE

INDIANAPOLIS, Nov. 7.-According to an announcement by the Barber-Warnock company of this city, the Barber-Warnock Special No. 28, which was driven in the 1924 Indianapolis race by Albert E. Moss of London, Eng., has been shipped to California for the Ascot speedway road race on Thanksgiving Day. The car will be driven in that race by F. C. Shawhan of Dayton, Ohio.

Canadian Ford Pleased With Success of New Used Car Plan

System Assesses Original Owner for Reconditioning and Fixes Fee for Dealer Handling Sale

FORD CITY, Ont., Nov. 8.—Ford Motor Co. of Canada, Ltd., has a used car plan which it has worked out with its dealers, which has now been in operation several months and which the company finds to be very successful. The main purpose of the plan is to bring used Ford buyers to the regular Ford dealer establishments, accomplishing this by an education campaign in used car values.

The plan is similar in some respects to other used car plans which have been operated by dealers in certain localities, principally in that it assesses the original owner for cost of reconditioning and also fixes a brokerage fee which the dealer gets for handling the sale.

Brings Buyer to Ford Dealer

The plan brings, or seeks to bring, the used Ford buyer to the regular dealer, by declaring that values can only be guaranteed by these dealers under a plan worked out by the company. The dealer for his part is obliged to take in cars only at real market value, recondition them and then guarantee them to be in a certain definite shape. If the buyer is dissatisfied with the car after a period of use he is permitted to return it and take another used car or new car, full allowance being made of the former car purchase price.

Company Aids Agents

The company originated the plan after studying market conditions generally in the Canadian provinces and recommends it to all its dealers. It provides seals and other incidentals to the carrying out of the plan, the seals being guarantees of the genuineness of the condition and acting as a guarantee generally for satisfactory performance. The company also provides its dealers with booklets describing the plan for circulation to prospective used Ford buyers.

The plan while adopted to meet used car conditions in Canada is available for all dealers supplied by the Ford Canadian company in any country in which there are used car difficulties.

Consolidation Effected by Two Piston Ring Companies

DETROIT, Nov. 8.—Consolidation of the Piston Ring Co. and the No-Leak-O Piston Ring Co., both of Muskegon, has been effected and dating from Nov. 1 they will operate as one company, the Piston Ring Co. being the parent and the No-Leak-O Company a subsidiary.

The latter company will maintain a separate indentity but will be operated as a division of the main company though separately organized. Previously the Piston Ring Co. was the manufacturer

of all products for the two companies, the No-Leak-O maintaining separate sales and service departments through which it merchandised its special brand of rings.

The affairs of the new company will come under the management of the Piston Ring Co. as at present constituted. The two companies will continue to merchandise the types of ring with which they have been identified, the parent company in the plain ring field and the subsidiary in the grooved ring field.

Recommends Many New Rules For State's Motor Law Code

BOSTON, Nov. 7.—Commissioner William F. Williams, of the Department of Public Works of Massachusetts, under whose jurisdiction comes the Motor Vehicle Department, has filed with the Special Recess Legislation Committee on Motor Vehicles his report as requested, giving ideas of what is necessary to make the present motor laws up to date.

He advocates better protection of grade crossings; jail terms for driving under the influence of liquor the first time; advancing from 16 to 18 years the age at which persons should be given licenses; traffic courts in the large cities; eye tests before applicants get licenses; compulsory insurance for injuries, if not for property damage; roadside stands for gasoline and those used by farmers on the State Highways to be under the jurisdiction of the State; better coordination of law enforcement between State, city and town officials; authority to remove blind corners by going upon private land when necessary.

Want More Early Cars For Museum

WASHINGTON, Nov. 8.—Plans are being made by the Smithsonian Institution to collect, and preserve for future generations, early and antiquated models of automobiles which have either made a transcontinental trip or taken part in early automobile races. The collection is being made by Carl W. Mitman, curator of engineering of the Institution. He has already collected nine old-fashioned motor cars, which are among the museum exhibits. The plan is to enlarge the exhibit.

One particular car which the museum is trying to locate, is one that traveled from New York to Paris, by way of Alaska, around 1900. If this car can be found the curator will provide a special place for its exhibition. With the racing models obtained, the collection of cars at the Smithsonian will probably be larger than any similar display in the country.

Claim Record For Gros and Martin in 24-Hour Driving

Speed Team Takes 122 Cu. In. Bignan Stock Car Total Distance of 1820.7 Miles

PARIS, Oct. 24 (By Mail).—Driving a stock four cylinder 16 valve 122 cubic inch Bignan, fitted with a two-seater body, Gros and Martin covered a distance of 1820.7 miles in 24 consecutive hours on the new concrete track at Monthéry, near this city. This is claimed as a world's record, for it beats the performance set up by S. F. Edge, when he drove for 24 consecutive hours on Brooklands track in 1907.

In order to set up a record for 300 kilometers (1864 miles) the Bignan continued after the twenty-fourth hour, its time for this distance being 24 hrs. 42 min. 5 sec. The fastest lap was made at an average of 85.6 miles an hour and the greatest distance covered in one hour was 82¼ miles.

With a 35 cubic inch Austin, driven by Waite, new class records have been set up on Montlhéry track for distances of 50 miles and 100 miles, and for one, three and four hours. The English car went out for world's 12 hour records, but had to stop after 4 hrs. 7 min., during which time it had averaged exactly 80 miles an hours. The first 50 miles were covered in 34 min. 16 sec., and the hundred miles in 1 hr. 14 min. 23 1/5 sec. The class record for 300 miles was lowered to 3 hrs. 45 min. 7 sec.

COURT ORDERS SALE

CINCINNATI, Nov. 8.—United States District Judge Smith Hickenlooper has entered a degree of foreclosure and sale in the foreclosure suit of the Union Trust Co., of Chicago, as trustee under the mortgage securing an issue of \$3,000,000 Series A bonds vs. the National Motors Corp. of Dayton, Ohio.

Under the degree the property of the defendent company at Dayton is to be sold on the premises to the highest bidder at noon Friday, Dec. 12, by Harold J. Linkert of Dayton, who is appointed special master to conduct the sale. From the proceeds of the sale priority is awarded to lien holders whose claims total approximately \$40,000, and to holders of receiver's certificates. The remainder of the proceeds is to be applied upon the \$3,000,000 outstanding Series A bonds.

GETS DURANT-STAR

FORT WORTH, Tex., Nov. 7.—The franchise for the Durant and Star cars in the Fort Worth territory has changed hands. L. Joe Bates has taken over the contracts formerly handled by the Reynolds-Gregg Motor Company, and will push Durant and Star sales in the Fort Worth district.

Call Issued by Hoover for National Safety Conference

Secretary Aroused to Action by Report Revealing Heavy Toll of Death in 1923

WASHINGTON, Nov. 8.—Preliminary surveys and studies having been completed by eight major committees, Secretary Hoover has issued a call for a national conference on street and highway safety to be held here on Dec. 15, 16, and 17. The need for such a meeting is reflected in the fact, the Secretary points out, that 22,600 people were killed outright; 678,000 injured, and \$600,000,000 damage to property was done in 1923 on the national highways in traffic accidents.

"This is a national loss of so appalling a character as to warrant the most complete consideration and effort at a drastic remedy," Secretary Hoover declared in issuing the call for the national conference.

"The importance of the question," said Secretary Hoover, "needs no emphasis beyond the bald statement of the facts brought out by the Statistical Committee comprised of eminent authorities who, after canvassing local, municipal, state and national information, insurance payments, etc., arrive at the conclusion that in 1923 not less than 22,600 persons were killed, 678,000 injured and \$600,000,000 of property damage incurred in traffic This represents an increase accidents. of 80 per cent within the last seven years. Of the accidents about 85 per cent were due to automobile traffic. This is a national loss of so appalling a character as to warrant the most complete consideration and effort at a drastic remedy."

Attending the December conference will be all divisions of the organization that are cooperating with Mr. Hoover in the safety campaign.

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Haynes Bondholders May Ask Authority to Continue Plant

KOKOMO, Ind., Nov. 8.—Robert L. Tudor, of Kokomo, was appointed trustee of the bankrupt Haynes Automobile Co., of this city, at a creditors' meeting held at Indianapolis Nov. 3. Mr. Tudor is actively connected with several firms and corporations here. His appointment met with the approval of the owners of the first mortgage bonds, who have first claim on all the property, with the exception of the inventory, as well as that of the creditors

The trustee immediately posted a \$50,-000 bond and took over the property. He stated, however, that he is not yet able to announce plans for the future, although it is understood that the plant and equipment will be put up for sale within four to six weeks. The possibility of the organization of a new Haynes company is seen in the action of the

bondholders who met here Oct. 24 and named a committee of five to look after their interests in further proceedings regarding the company.

It is considered likely that the bondholders, through their committee, will endeavor to have the referee in bankruptcy set off the plant and business to them in full liquidation of their bonds and permit them to operate the business.

Mechanical Features of Two Way Drive Super Trucks

(Continued from page 19)

hand when operated by the driver's right foot will cause the lower member to move away from the stop on the clutch throwout arm, and at the same time will tighten its chain so as to apply the brakes.

One of the illustrations shows the rear axle construction which incorporates the reverse gearing. Two bevel gears mesh with the conventional pinion. The two bevel gears float on bearings in the housing, and either one or the other of them drives the spur gear in the center, this gear being shifted to one side or the other by the action of the reverse lever at the side of the driver's seat.

As the two bevel gears mesh with and are driven by the same pinion, they will rotate in opposite directions, so that the direction of rotation of the spur gear will change depending on which way it is shifted.

As the spur gear is shifted so that one side of it meshes with the internal gear of one of the bevel gears, it at the same time centers its other portion in the space between the bevel gears, and in this space the bull gear goes, being in its turn driven by the spur gear. From the bull gear the conventional type of drive shafts are used to transmit the power to the wheels.

The gear shift lever provided for the transmission is located in the center of the truck and has five positions for getting the five different gears. The emergency brake lever is adjacent to the gear shift lever.

U. S. Automotive Tax Receipts for Nine Months 32 Million

Figure Lower Than in Same Period Last Year. September's Collections \$11,712,055.84

WASHINGTON, Nov. 8.—A total of \$11,712,055.84 in excise taxes was collected from the automobile industry during the month of September, according to figures of the Internal Revenue Bureau of the Treasury Department. Comparing this figure with the same month of last year, the current month's collection was \$1,134,950.45 less than the tax collected in September of last year. The decrease this September over last is accounted for largely by the fact that many items which were taxable last year have been reclassified and are not now listed as "luxuries."

Total excise taxes for the first nine months of this year, collected from the automobile industry, amounts to \$32,642,-661.80, compared with \$39,968,367.76 collected the first nine months of last year—representing a decrease of \$7,505,705.96 for the nine months.

Comparing the excise tax collected from the automobile industry, with that collected from other industries, the figures show that for the month of September approximately ONE-THIRD of the total tax, which amounted to \$35,293,542.47, was collected from the automobile industry. The special stamp tax on tobacco, amounting to \$29,672,821 is the largest single source of revenue to the government, exclusive of the excise tax. The aggregate Federal receipts, from all sources for September were \$423,449,-693.97.

GET BALTIMORE AGENCY

BALTIMORE, Nov. 7.—The Winton Company of Baltimore, Inc., Baltimore, by an arrangement just made will handle Chandler and Cleveland cars, formerly handled by H. S. Block. The entire building at Charles and Oliver streets will be used for sales and service.

Safety and Road Courtesy Will Be Taught Drivers by San Antonio School

SAN ANTONIO, Texas, Nov. 8.—Automobile drivers have not been grounded in the principles of safety in connection with the handling of motor cars. They are lacking in "street and road courtesy," and these things are the causes of accidents, property losses, deaths and damage suits. That is the opinion of the Bexar County Safety Council and those are the reasons a school for drivers will be opened here shortly.

Primarily the school for drivers will be for the benefit of these who employ automobile drivers, department stores, laundries, the bakeries, and other business lines. But the school will be open for all persons who care to take advantage of its services. There will be no charge for the tuition in this school. The cost will be maintained by the safety council. Employers have informed the safety council if it will conduct such school they will employ only the school's graduates.

Moon Net for First Nine Months of Year \$526,072.38

Sales for Three Quarters Amounted to \$7,675,128.54, Says Statement by Stewart McDonald

ST. LOUIS, Nov. 10.—Net earnings of the Moon Motor Car Company for the first nine months of the year were \$526,-072.38 and sales were \$7,675,128.54, according to a statement issued by Stewart McDonald, president of the organization.

The cash position of the company as of Sept. 30, according to the statement, shows net current assets of \$2,290,166.35, with current liabilities of \$634,525.12, which includes \$135,000 declared, but not payable until Nov. 1. The balance sheet of Sept 30 shows no bank loans or any outstanding obligations for borrowed money

The statement says in part:

"During the first 9 months of the year the company has been in easy financial position notwithstanding this year has not been considered as good as 1923 for automobile companies. Number of shares outstanding \$180,000, no par value, no bonds or preferred stock. Dividends for the year practically earned in the first nine months and business for the last quarter reported ahead of 1923. Company contemplates no change in dividend, no issue of additional stock and no financing necessary."

Wants Court to Set Date for Sale of Duesenberg Property

INDIANAPOLIS, Nov. 8.—Receiver Rassmussen of the Duesenberg Automobile & Motors Co., which has been operated by him, for several months, will petition the court here to set a date for the sale of the property. It is understood that the receiver and interested parties know of several prospective bidders and the reorganization is one of the possibilities of the proposed sale.

MAKE SEDAN TYPE BUS

BUFFALO, N. Y., Nov. 10.—A sedan type bus, known as the Stewart Highway Sedan, now is being manufactured by the Stewart Motor Corp. of this city. This vehicle comprises an 18-passenger body with five transverse seats upholstered in leather, mounted on the Stewart 1½-ton, 160-in. wheelbase speed truck chassis.

G. M. DIVIDEND DECLARED

NEW YORK, Nov. 10.—General Motors directors have declared for the fourth quarter of 1924 a dividend of \$1.25 a share on the new common stock payable Dec. 12 to stock of record Nov. 17, 1924; also quarterly dividends of \$1.75 a share on the 7 per cent preferred, \$1.50 a share on the 6 per cent debenture and \$1.50 a share on the 6 per cent preferred payable Feb. 2, 1925 to stock of record Jan. 5, 1925.

PAIGE ELEVATES WHEELER

DETROIT, Nov. 15.—William A. Wheeler has been elected a vice-president and director of the Paige-Detroit Motor Car Co., filling the vacancy on the board caused by the death of Sherman L. Depew. Mr. Wheeler will also serve as assistant to the president. In recent years he has been in charge of the manufacturing division of the Paige company. He has been a member of the Paige organization since 1914, his earlier manufacturing experience being obtained in the New England district.

Auburn Steps Up Output to Meet Big Demand for Cars

AUBURN, Ind., Nov. 10.—Production of the Auburn Automobile Company is six weeks behind orders on file, according to a statement by E. L. Cord, vice-president and general manager of the company who says further that November production likely will be stepped up 100 per cent over October. The Auburn company's business is said to be heavier than ever before at this season of the year. "By the way orders continue to come into the factory," says Mr. Cord, "it looks as though November and December would both be banner months for Auburn.

"Cannon Ball" Baker Is Early Bird in Ascot Cup Practice

Jewett Driver Gets Pole Position in Thanksgiving Day Road Race in California

LOS ANGELES, Nov. 10.—Official practice of entrants for the \$52,000 Ascot Gold Cup Road Race scheduled for Thanksgiving Day, opened on Nov. 1, with "Cannonball" Baker at the wheel of a Jewett being the pilot to make the initial circuit of the course. Thus, the "back to nature" auto racing movement actually materialized.

Baker was awarded the coveted number one starting position and car number by virtue of being the first entrant to establish a training camp on the course. Closely following Baker, as he roared over the five-mile route, was Frank Lockhart in a Deusenberg straight-eight racing car. Cliff Bergere, French pilot, was third, while "Les" Allen of Chicago, driving a Chrysler, was fourth in the speed procession over the opening lap.

Twenty-four entries have already been filed, with many factories having signified an intention of entering one or more cars each. Ascot officials predict an entry list of 50.

The winner of the race will receive \$20,000.

25 Years Ago In the Automobile Industry As Recorded In MOTOR AGE

(From MOTOR AGE of Nov. 14, 1899) Germany Buys Our Automobiles

PHILADELPHIA, Nov. 6 .- Since the close of the International Commercial Congress the majority of the foreign delegates have been thoroughly studying the exhibits at the National Export Exposition, as a result of which numerous orders have been secured by the American firms represented. Especially is this the case in the machinery and vehicle departments. One of the most surprising transactions was the purchase by Alexander Post, of Hagen, Germany, of one each of several varieties of American automobiles on exhibition in the vehicle building. Herr Post says he was first attracted by the superiority of the ballbearing running gear of the American machines. He says the purchases are made for German automobile builders, and intimates that the superior points of the American machines will be taken advantage of by his countrymen, who will most probably incorporate them in their future output.

Government Patronage

The French secretary of posts and telegraphs, M. Mougeot, is preparing to experiment with the automobile for the collection and delivery of mails. Similar experiments have been advocated by postmasters in the United States, and, in at least one case, successfully made. The time is probably not far distant when the

governments of the world will be liberal patrons of the self-propelled vehicle industry.

Another Test Case

The preliminary test case has been decided that, for the present, the automobile may use Central Park in New York. Now comes another sort of test case. S. H. Treager of Peoria has brought suit against A. T. Roberts of California who was driving an automobile over the streets of the Illinois city, for \$500 damages caused by Mr. Treager's horse taking fright at the automobile, running away and injuring itself, in addition to smashing the buggy.

The Automobile a Political Factor

The automobile assumed a new role in the election of New York. Isidor Cohn was a candidate for assemblyman and electrified his prospective constituents by utilizing an automobile to travel over the district and from the steps of which he made political speeches.

Advertising the Automobile

One of the best advertisements that automobilism has received is that of E. C. H. Bagley of London who is at the head of an automobile factory. Mr. B. asserts that the horse drawn load costs 24 cents a ton per mile to transport while the automobile can carry it for three cents. The statement is widely copied by the newspapers everywhere.

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Wider Development of Foreign Business Is Urged by Reeves

Europe's Idea That Motor Car Is Luxury Must Be Dissipated, Declares N.A.C.C. Manager

WASHINGTON, Nov 8.—Wider participation by the automobile manufacturers of the United States in foreign business, is seen as a necessity and good business practice, by Alfred Reeves. General Manager of the National Automobile Chamber of Commerce, who was in Washington recently.

That automobile manufacturers already have seen the trend of their future business, is seen by Mr. Reeves in the fact that already 20 members of the National Automobile Chamber of Commerce have become members of the International Chamber of Commerce.

The export of cars and trucks during 1924 will be approximately 350,000, in the estimate of Mr. Reeves, which, he points out, will be only about 10 per cent of production. The minimum ratio of exports to production, he declares, should be 25 per cent.

"The work which American motor car manufacturers must do in their conquest of foreign business, is well defined and clear cut." Mr. Reeves declares. "The idea that a motor car is a luxury, which is universal in Europe, must be dissipated. That's a part of out job. Europe's method of tariff taxation-on the pound basis—is also wrong and unjust. taxes on motor cars is almost prohibitive. The rectifying of these things can be very materially helped by the International Chamber of Commerce and the participation, in an active way of American manufacturers, in their work, is a good omen for the future foreign business." he declares.

France Now Leads Europe in Passenger Car Registrations

PARIS, Oct. 24.—French automobile registration totaled 468,331 for the year 1923, this being the latest period for which official returns have been published. During the year the increase was 81,251, which is practically the same as that of the year 1922. The above total includes passenger cars and trucks but is exclusive of motorcycles and side cars. As it is known from production figures that the number of cars increased during 1924, the total in service at the end of the year doubtless will be 550,000.

France now apparently heads the list of European countries for number of automobiles in service, for although England puts forward a bigger motor conveyance total, this is obtained by including 250,000 motorcycles and several thousand agricultural tractors. There are comparatively few motorcycles in France, and agricultural tractors are not looked upon as motor vehicles.

Attended Kokomo Rubber Company's Recent Sales Conference Held at Factory



New Peerless Models Announced (Continued from page 21)

The tail lamp has a nickel shell and embodies a stop signal and backing light operated by the brake pedal and the gearshift lever. The instruments now are grouped in two oval panels. The right panel includes ammeter, gasoline gage and oil gage, and the left panel speedometer and clock. Running board mats are of rubber with integral step pads.

HEAVIER REVENUE COLLECTIONS

WASHINGTON, Nov. 7.—Internal revenue collections from automobiles, motorcycles and accessories for the month of August, 1924, amounted to \$9,277,186, or an increase of \$262,142 over August, 1923, when collections were \$8,995,044.

The segregated taxes collected from the automobile industry for August, 1924, were: Motor trucks and automobile wagons, \$701,899; other automobiles and motorcycles, \$6,156,299; automobile parts and accessories, \$2,418,987; as compared with the following for August, 1923: Motor trucks and automobile wagons, \$700,516; other automobiles and motorcycles, \$5,134,582; automobile parts and accessories, \$3,159,944.

215 ATTEND DRIVERS SCHOOL

BALTIMORE, Nov. 7.-A total of 215 men, most of them drivers of commercial vehicles, and six women, attended the first session of the safe drivers' school which has been opened by the Baltimore Safety Council and which will run six weeks. Speakers at the meeting included Charles R. Posey, of the Mutual Life Insurance Company of New York, whose subject was "Safe-Guarding the Community," and Joseph Bavett, superintendent of machinery for the Yellow Cab Company, who discussed "Automobile Brakes and Braking." Motion pictures of "Electricity in the Motor Car" and "The Starter Generator" were shown.

Zborowski Left Estate in America Valued Above Million

NEW YORK, Nov. 8.—Count Louis Zborowski, killed in the race on the speedway at Milan, Italy, Oct. 19, was a grandson of Mary Alice Astor, grand-daughter of the first John Jacob Astor. He left an estate in this country which is valued at more than a million dollars, which will be distributed among relatives and friends. This fact was brought out through the filing of his will for probate in this country.

The count met death on the race track as did his father before him. He raced in the 500 mile event at Indianapolis in 1923, piloting a Bugatti, which lasted forty-one laps, being put out by a broken connecting rod. Following this the count purchased a Miller Special which he took back with him to Europe. He also was instrumental in getting the late Jimmy Murphy to return with him and participate in several Italian races.

GIVEN CHANDLER CONTRACTS

CLEVELAND, O., Nov. 10.—The Chandler Motor Car Co. announces the appointment of the following dealers:

pointment of the following dealers:

Wm. H. Richards, 315 E. Main St.,
Visalia, Cal.; Eve Brothers, Victoria, B. C.;
Nettleton & Adams Garage, Loveland,
Colo.; Silsby Motor Co., New Smyrna, Fla.;
Newston & Clapp, Morris, Ill.; Hite D.
Bowman Co., Louisville, Ky.; The Winton
Co. of Baltimore Inc., Charles & Oliver
Sts., Baltimore, Md.; Plymouth Garage,
Northampton, Mass.; Glen O. Coker, Jonestown, Miss.; Chandler Cleveland Co., Reno,
Nevada; H. E. Putt & Co., Sugar Creek,
Ohio; Nobel Motor Co., R. F. D. No. 4,
Searights, Uniontown, Pa.; Bill Jones Auto
Co., Chattanooga, Tenn.; Filgo Motor Co.,
Dallas, Texas.

MORE MOTORS, FEWER HORSES

MILWAUKEE, Nov. 8.—An increase of 6,994 passenger cars and a decrease of 1,215 horses in the city of Milwaukee in the past year is the result of a survey made on the basis of the statistics collected by the city tax commissioner for personal property assessment purposes. The census was taken as of May 1. The value of the 51,653 car assessed is given as \$21,912,940.

With the Associations

Nominated For N. C. C. Board

WASHINGTON, Nov. 10.—A. J. Brosseau, president of the Mack Bros. Motor Car Company, and secretary of the National Automobile Chamber of Commerce, was one of eight new directors of the National Chamber of Commerce of the United States placed in nomination at the mid-year meeting of the Eastern Division of the Chamber. Mr. Brosseau's nomination was seconded by A. C. Pearson, vice-president of the Class Journal Company. The election will be held at the next annual meeting of the Chamber in Washington next spring.

Iowa Convention Dates Set

DES MOINES, Ia., Nov. 10.—The sixth annual convention of the Iowa Automotive Merchants' Association will be held in Des Moines November 13-14, according to an announcement made by Secretary-Manager A. J. Knapp. The morning of the 13th will be given over to registration, reception and three divisional meetings,—Garage and Maintenance, Batteries and Electrical, and Tires. The afternoon will be given over to addresses. The annual banquet will be held the same evening. The business meeting will be held immediately following the banquet.

Sessions on the morning and afternoon of Nov. 14 will be devoted to addresses and discussions.

Among the speakers on the convention program are: C. A. Vane, general manager of the National Automobile Dealers' Association, R. V. Fletcher, general solicitor of the Illinois Central Railroad Company, and C. F. Kettering, of the General Motors Research Corporation.

S. A. E. Section Plans Meetings

CLEVELAND, O., Nov. 8 .- An interesting calendar of events has been prepared by the Cleveland Section of the S. A. E. for the winter and spring season. On Nov. 18-19 members of the section will attend the National Service Meeting in Cleveland; on Dec. 15, the section will hear an address by Ernest E. Wemp of the Long Manufacturing Company on the "Development of Clutches"; Jan. 19 Arthur H. Denison and possible Thomas Midgley, Jr., will talk on "Fuel Charges Mixing and Detonation"; on the third Monday in February J. H. Hunt, of the General Motors Research Corp., will discuss "Electrical Instruments and Measuring Chassis Tests by Means of Them"; in March the section will hear Harry Horning, president of the Waukesha Motor Co., on "Road and Riding Ability"; it is expected that the April session will be addressed by a member of the Goodyear Tire and Rubber Co. on the design and construction of the new Goodyear zeppelins. The meeting is open but it probably will provide a talk on tubular front axles.

Adopt New Name

MINNEAPOLIS, Nov. 10.—Minneapolis Motor Trades Association has succeeded the Minneapolis Garage Owners Association, to better describe the purpose of the organization. Officers chosen at the annual meeting are: President, S. W. Eddy; Vice-president, W. R. Vashro; Treasurer, E. A. Zollie; Secretary, A. N. Benson; Directors, Thomas Gavin, F. B. Wilcox, J. L. Mowry, Clifford Horton, W. J. Potts, H. S. Christian.

Lease Building For Show Center

MINNEAPOLIS, Nov 10.—The Minneapolis Automobile Trade Association has engaged the Overland building in St. Paul again for its annual Twin City Automotive Exposition, Feb. 7-14. Claude Paxton, district manager, made the lease for Willys-Overland, Inc.

Coming Motor Events

Automobile Shows

- Baltimore.......Jan. 17-24

 Nineteenth Annual Automobile
 Show, Baltimore Automobile
 Trade Association.
- Annual Automobile Show Brooklyn Motor Vehicle Dealers Ass'n.
- Chicago Jan. 23-31, 1925
 National Automobile Chamber of
 Commerce.
- Chicago ______Jan. 26-3 Twentieth Annual Automobile Salon.
- Cincinnati Jan. 10-17
 Cincinnati Automobile Show,
 Music Hall Auditorium, under the
 auspices of Cincinnati Automobile
 Dealers Association.
- Detroit Automobile Show, Detroit Dealers' Association.

 Kansas City Man
- Kansas City, Mo._____Feb. 7-14, 1925 Kansas City Motor Car Dealers' Association Show.

- New York Nov. 9-15
 Twentieth Annual Automobile Salon, Hotel Commodore.
- Omaha, Neb.....Feb. 16-21, 1925 Twentieth Annual Omaha Automobile Show.
- Pittsburgh, Pa......Jan. 31-Feb. 7, 1925
 Twenty-ninth Annual Automobile
 Show. Motor Square Garden, under the auspices of the Automotive Association, Jno. J. Bell,
 Manager.

Foreign Shows

- Berlin ______Dec.4-1
- Washington, D. C.......Jan. 24-31
 Annual Show to be held on both
 floors of Convention Hall under
 auspices Washington Automotive
 Trade Association. Rudolph Jose,
 Chairman Show Committee. 1138
 Connecticut ave., Washington,
 D. C.

Conventions

- Chicago ______Jan. 26-29, 1925
 Eighth Annual Convention, N. A.
 D. A., Hotel LaSalle.
- Cleveland Nov. 18-19

 Joint Service Meeting of the Society of Automotive Engineers
 and the National Automobile
 Chamber of Commerce.
- Annual Meeting of the Society of Automotive Engineers.

SI

- Montgomery, Ala......Jan. 26, 1925 Annual Convention, Alabama Automotive Trades Association.
- New York City_______Jan. 7, 1925 New York Show, Convention N. A. D. A., Hotel Commodore.

Races

Los Angeles Speedway Association—250 miles.



You can never
Keep a good man
DOWN
But radio certainly
Can keep him
UP.

And just think what radio does with some of this jazz music, for instance. Even after we receive the stuff it travels on and on, never to return. Thank heaven for the radio.

Hearing grand opera as you are sitting with your feet in a hot tub of water, paring a corn or having your back rubbed with witch hazel—is another pleasing revolution that has come with wireless development.

A Mexican used his automobile for suicide. Details lacking. However, he probably bumped himself off on one of Mexico's famous roads.

Loeb and Leopold might be pestered even yet by publishers wanting material for articles, but you can bank on one thing—automobile salesmen are not bothering them.

After all, we might have known long before election which presidential candidate would get the great silent vote.

Speaking of peace and quiet, Great Britain is trying to find a practical silencer for use on motorcycles. Hope one is located that restaurants could also use on soup spoons.

Automotive accessories will be appropriate Christmas gifts. Here's hoping the necktie trust is about to gasp its last.

Now all that the automotive industry asks of the many politicians who have been wanting to help business is to —GANGWAY.

PRECAUTIOUS WILLIE



Along comes another invention recommended for the elimination of Squeeks and Rattles. Shoot if you will this old gray head—and we will turn our skill to something even more devilish.

Too Much of a Good Thing
The good man always casts his vote
The saying's very nice,
A guy I know is VERY good
He voted at least twice.

-ASBESTOS.

Trade Commissioner Howard, located in Shanghai, reports that motorized funerals are getting to be the cat's adam's apple in China. If there is anything China needs in funeral facilities more than anything else these days it's—more speed.

An old-timer in the Row says whenever he thinks about celebrating the industry's early days he gets so enthused he feels just like he's gotta put on his old swallow-tail coat, toothpick shoes, ascot cravat and his gates ajar collar—then turn his fog horn toward heaven and sing "Little Annie Rooney".

Prices and Weights of Current Passenger Car Models

Ship.	Pass.	Body Style	Price	Ship		Body Style	Price	Ship.		Body Style	Price	Ship.	Pass.
AMER	ICAN	"D-66"		** 6.	1 455	"X"	Trice	8050	5-p	Sedan B	1,250	GRAY.	
2985 \$175	2-p 4-p	Roadster Sp. Roadster	\$1,950 2,050	8020	8-p	Roadster	\$1,670	3098	5-p 5-p	Spec. "B" Sedan Sedan A	1,350 1,385	1755 1735	5-p 7 2-p (
\$260 \$300	Б-р 5-р	Touring Sport	1,695 1,850	3050 3380	5-p 5-p	Touring Sub. Coupe	1,695 2,390	3190	5-p	Spec. "A" Sedan	1,485	1880	3-p
8310	7-p	Touring	1,760	3400	5- p	Sedan "Y"	2,485	2595	5-р	"27" Touring	\$1,095	2030 2130	5-p 8
\$190 \$470	4-p 7-p	Sp. Touring Sedan	1,885 2,550	8975	7-p	Touring	\$2,475	2780 3010	5-p 5-p	Sp. Touring Bres. Coupe	1,245 1,385	HCS	
8810 ANDE	5-p RSON	Brougham "41"	2,195	4320 3050	7-p 2-p	Sedan Roadster	3,325 \$1,795	3030	5-p	Coupe	1,535	8360	4-p
2650		Touring	\$1,195	3020 3055	4-p 5-p	Roadster Touring	1,785	3045 8080	5-p 5-p	Sedan Brougham	1,595 1,535	3750 3950	4-p 7
2675 2925	4-p 2-p	Sp. Touring Coupe	1,445 1,425	3150	7-p	Touring	1,585 1,735	DUES	ENBE	RG St. "8"		4010	4-p
2875 2925	5-p	Sedan Sp. Sedan	1,695 1,895	3020 3280	4-p 5-p	Royal Dispatch Chummy Sedan	1,885 2,045	3600	2-p	Roadster	\$6,500	HATF	
		"50"		3375 3375	5-p 5-p	Sedan Metro Sedan	1,995 2,195	3700 3920	5-p 7-p	Phaeton Phaeton	6,250 6,750	3080 3225	4-p
2975 8200	7-p 7-p	Touring Sedan	1,595 1,945	3510 3480	7-p	Sedan	2,195	3980 4000	4-p 4-p	Sp. Phaeton Coupe	6,500 7,500	3300	5-р
APPEI	RSON	"6"			7-p ROLE	Limousine T	8,095	4350 DU P	7-p	Sedan "C"	7,800	HUDS	ON "S
2965		Sp. Phaeton Coupe	\$1,695 1,985	OHL:	HOLL	"Superior"		3300	2-p	Roadster	\$2,090	8300 3425	4-p 3
8400 8450	5-p 5-p	Sedan Sp. Sedan	2,095 2,295	1690 1790	2-p 5-p	Roadster	\$495	3400 3600	5-p 5-p	Touring Touring Sedan	2,090 3,050	3450	5-p
9400	0-10	"g"		1955	5-p	Touring Phaeton DeLuxe		3600 DURA	5-p NT	Suburban Sedan "A-22"	3,050	3585 3675	5-p 8
4100 4315	5-p 7-p	Phaeton Phaeton	\$2,485 2,535	2005	4-p 4-p	Coupe DeLuxe	725 775	2285 2325	2-p	Roadster Touring	\$1,080 890	HUPN	OBILE
4250	5-p	Sport Phaeton Sport Phaeton	2,800 2,900	1880	2-p 5-p	Utility Coupe Coach	640 695	2345	5-p 5-p	Touring F.W.B.	940	2595	2-p 1
4440	5-p	Sedan	3,485	2070	5-p 5-p	Sedan Sedan DeLuxe	795	2 395 2495	5-p 4-p	Sp. Touring Coupe	1,140 1,340	2730	5-p
4555		Sedan Sport Sedan	3,585 3,850	CHRY	_	Sedan DeLuxe	940	2405	2-p 4-p	Business Coupe Spec. Coupe	1,035 1,410	2760 2860	2-p (
4570 AUBU	-	Sport Sedan "6-43"	3,750	2620	4-p	Roadster	\$1,625	2605 2770	5-p 5-p	Sedan Spec. Sedan	1,365 1,550	2975 2895	5-p 5
2610	5-p	Special Touring		2570 2600	5-p 5-p	Touring Phaeton	1,395 1,495	2550		Coach	1,185 1,250	JEWE	
2760 2900		Sp. Touring English Coach	1,465 1,945	2800	4-p 5-p	Coupe Sedan	1,895	ELCA	5-p R	Spec. Coach "4-40-41"		2690 2810	5-p 1
2885		Sedan	1,795	2915	5-p	Imperial Sedan	1,825 2,065	2560 2585	5-p 5-p	Touring Demi Sp. Touring	\$995 1,095	2880	3-p 1 5-p 5
3225	5-р	"8-63" Sp. Touring	1,895	2855	5-p 5-p	Crown Sedan Brougham	2,195 1,895	2641 2900	5-p 5-p	Sportster Sedan	1,195 1,495	3095	5-p
3550 3510	5-p 5-p	Sedan Brougham	2,550 2,395	CLEV	ELAN	D "43"		2981	5-p	Sp. Sedan	1,695 1,265	2775	5-p 5
3550	7-p	Sedan	2,550	2750 2810	5-p 5-p	Touring De Luxe	1,095	2779 2829	5-p 5-p	Brougham 8 d. Sp. Brough. 8 d.	1,395	JORD	
BARLI 2750	5-p	"6" 6-50 Touring	\$1,395	2830 2870	3-p 3-p	Coupe	1,295	2600	5-p	"6-50-51" Demi Sp. Tour.	\$1,220	8000	2-p 1
2800 8100	5-p 5-p	Sp. Touring Sedan	1,495 1,850	3040	5-p	Spec. Coupe Spec. Sedan 4 d.	1,395 1,495	2690 2900	5-p 5-p	Sp. Touring Sedan	1,420 1,720	3100 3420	5-p 7
8150	5-p	Sp. Sedan	2,250	3090 2930	5-p 5-p	Sedan de Luxe Brougham	1,695 1,545	2981 2779	5-p 5-p	Sp. Sedan Brougham	1,920 1,490	3375	4-p
BUICE 2750	2-p	"Standard" Roadster	\$1,150	COLE	MAST	TER		2829	5-p	Sp. Brougham	1,620	8260	(124½ 4-p
2800 2920	2-p	Roadster Encl. Phaeton	1,190	3675 3795	4-p 7-p	Volante Tour. West. Tour.	\$2,325 2,325	2007	5-р	"6-61" Touring	\$1,585	3585	5-p S
2970	5-p 2-p	Phaeton Encl. Business Coupe	1,250 1,375	3675	4-p	Aero-Vol. Tour.	2,475	3380 3675	5-p 5-p	Sedan Sp. Sedan	2,245 2,395	3330	2-p I
8075	4-p	Coupe	1,565	4055 4000	5-p 7-p	Brouette Sedan Royal Sedan	3,225 3,225	3380	4-p	Brougham "8-80"	1,995	3340 3635	5-p 1
8185 8245		Dbl.ServiceSedan Regular Sedan	1,475	4100	7-p	Royal Limousine	e 3,325		3-р	Roadster	2,315 2,165	3520 3525	4-p \ 5-p \
	(19	"Master 0 in. W. B.)		CUNN	INGH	AM "V-4"			5-p 7-p	Sp. Touring Sp. Touring	2,265	KING	0-р
	2-p	Roadster	\$1,365	4600	7-p	Touring	\$6,300	ESSE		Sedan	2,765	3428	2-p S
8455		Roadster Encl. Phaeton	1,400 1,395	4500 4700	4-p 4-p	Sp. Touring Coupe	5,800 7,150	2130 2305	5-p 5-p	Touring Coach	\$90 0 945	3428	4-p
8675		Phaeton Encl. Coupe	1,475 2,125	5000	6-p	Sedan	7,650	FLIN7 3095	3-р	"55" Sp. Roadster	\$1,630	3528 3645	5-p 3-p
8845	5-p	Sedan	2,225	DAGM 3800	4-p	"6-70" Sp. Touring	#9 FOO	3145	5- p	Touring	1,495 1,675	3875 8400	5-p 5
8470	8-p	8 in. W. B.) Sp. Roadster	\$1,750	4200	4-p	Sedan	\$3,500 4,500	3165	5-p 5-p	Encl. Touring Sp. Touring	2,050		4-p 8
8605 8645		Sp. Phaeton Phaeton	1,800 1,625	DANI	ELS	****		3165 3355	4-p 4-p	Sp. Touring Coupe	1,795 2,095	3428	2-p (12
		Phaeton Encl. Country Club	1,700 2,075	4150	4-p	"24-38" Touring	\$6,800	3470	4-p 5-p	Sedan Brougham	2,185 2,735	3428 3528	4-p 1
8 940 4020		Brougham Sedan Sedan		4765 4600	7-p 4-p	Touring Sedan	6,900	2400		"40" Touring	1,075	3645 3875	4-p (
	7-p	Sedan Limousine	2,525	5200	7-p	Sedan	7,600 7,800	2400	5-p 5-p	Encl. Touring	1,151	3400	7-p 1 5-p 5
CADIL		Town Car "V-63"	2,925	DAVI		"90"		FORD	5-p	Brougham	1,630	KISSE	
4190 4280	4-р 7-р	Roadster Touring	\$3,085 3,085	2650 2915	4-p 4-p	M. O'War Road. Legionaire Tour.	\$1,495 1,495	Wit	hout S	tarter and Dem. R	tms	2980	5-p 1
4200	4-p	Phaeton	3.085	2750 8070	5-p 5-p	Phaeton Sedan	1,395 1,895	1395 1517	2-p 5-p	Runabout Touring	\$265 295	8170	5-p I
4270 1870	2-p 5-p	Coupe Sp. Coupe	3,875 3,950	3065 2700	5-p 5-p	Porline Sedan Brougham	1,995	1540 W	ith Sta 2-p	rter and Dem. Rin Runabout	ns \$350	3190 3530	5-p 2-p
4600 4610	5-р 7-р	Sedan Sedan	4,400 3,585	2100	0-p	"91"	1,595	1662 1772	5-p 2-p	Touring Coupe	380 525	3430 3530	4-p 6
4480 4580	5-p	DeLuxe Sedan Town Brougham	4,150	2835 3020	4-p	Roadster	1,795	1950	5-p	Sedan, Fordor	685	3530 3530	5-p 5
4640 4640	7-p	Limousine Imp. Suburban	4,600 4,500	3245	5-p 5-p	Phaeton Sedan	1,695 2,195	1898 FRAN	5-p KLIN	Sedan, Tudor	590	3530 3130	2-p 1 2-p 3
4560	7-p	DeLuxe Suburbar	4,250	3050 3215	5-p 5-p	Brougham Berline Sedan	1,895 2,295	2580 2710	5-p 4-p	Touring Coupe	\$1,950 2,750	4070	7-p
4380 4475	4-p 5-p	Victoria Landau	3,275 3,650	DORE		"6-80"	-,	2780	5-p	Sedan	2,850	4010 LEXI	7-p 1 NGTON
	"Cı	astom Built"		4120 4115	4-p 7-p	Pasadena Tour. Touring		2655 2765	5-p 5-p	Demi-Sedan Brougham	2,250 2,850		5 m 7
*******	2-р	132 in.) Coupe	4,350	4198 4200	4-p	Coupe	3,950 4,985		5-p	Touring Lim.	2,950		5-p 7
4400	5-p	(138 in.) Coupe	4,350	4310	5-p 7-p	Sedan Sedan	5,550 5,8 0 0	2520	3-p	"Series 5" Roadster	\$ 945		5-p S
4490	5-p	Sedan	4,550			OTHERS		2545 2550	3-p 3-p	Spec. Roadster Radio Roadster	1,045 1,135		"Mi 2-p I
4655		Suburban Imp. Suburban	4,650 4,950	2494 2658	2-p 2-p	Roadster Spec. Roadster	\$865 965	2555 2610	5-p	Touring Special Touring Touring Delaye	995		5-p
CASE 8260	8-p	J. I. C. Roadster	\$1,840	2591 2755	5-p 5-p	Touring	895	2650	5-p 5-p		T-LAGO		5-p I
8290	5-p	Touring	1,885	2793	4-p	Spec. Touring Coupe	995 1,375	2590 2750	5-p 5-p	Touring "A" Radio Touring	1,045 1,145		7-p 7
\$570	5-р 4-р	Spec. Touring Sub. Coupe	2,160 2,480	$\frac{2755}{2755}$	2-p 2-p	Bus. Coupe Spec. Coupe "B	1,035 " 1,135	2680 2895	5-p 5-p	Coupe Sedan	1,275 1,475		5-p 1
8640	5-p	Sedan	2,590	2929	4-p	Spec. Coupe	1,475	3070	5-p	Sp. Sedan	1,595		5-p E

	Ship. Wt.	Pass.	Body Style	Price
	GRAY		"0"	1 1108
	1755 1735	5-р 2-р	Touring Coupe	\$634 750
	1880	3-p	Coupe	845
j.	20 30 2130	5-p 5-p	Sedan Sport Sedan	895 995
	H C S	4-p	"4" Touring	\$2,250
	3750	4-p	"6" Touring	\$2,654
•	3950 4010	4-p 4-p	Coupe Sedan	3,350 3,350
)	HATF	IELD	"6-55"	
	3080 3225	4-p 4-p	Sport Touring Coupe	\$1,775 2,175
	3300	5-p	Sedan	2,350
	HUDS	ON	"Super Six"	
)	8300	4-p	Speedster	\$1,400
	3425 3450	7-p 5-p	Phaeton Coach	1,500
)	3585 3675	5-p 7-p	Sedan Sedan	2,150
0		IOBIL		6,404
			"R"	
	2595 2730	2-p 5-p	Roadster Touring	\$1,225 1,225
	2760 2860	2-p 4-p	Coupe Coupe	1,450 1,595
,	2975	5-p	Sedan	1,800
)	2895 JEWE	5-p	Club Sedan	1,475
0	2690	5-p	Touring	1,135
5	2810	5-p 3-p	DeLuxe Touring Bus. Coupe	1,310
5	2880	5-p	Sedan DeLuxe Sedan	1,545 1,745
5	3095 2775	5-p 5-p	Brougham	1,385
		5-p	Sp. Brougham	1,525
5	JORD	AN (1	120 in. W. B.)	
0	8000	2-p	Playboy Road.	\$1,850
)	3100 3420	5-p 5-p	Touring Brougham 4 d.	1,775 2,385 2,385
	3375	4-p	Victoria	2,384
	8260	4-D	14 in. W. B.) Blueboy Touring	2,095
	3585	0-D	Sedan Series "A"	2,000
	3330	2-p	Playboy Road.	2,575 2,575
	3340 3635	5-p 5-p	Touring Brougham	2,875
	3520 3525	4-p 5-p	Victoria Sedan	2,775 2,975
	KING			
	3428		20 in. W. B., Sportster	\$1,896
	3428	2-p 4-p	Foursome	1,595
)	3528 3645	5-p 8-p	Touring Coupe	1,595
	3875 8400	5-p 5-p	Sedan Road King Sedan	2,400 1,495
)		4-p	Sedanette	1,995
	3428	2-p	24 in. W. B.) Sportster	\$1,996
	\$428 \$528	4-p 7-p	Foursome Touring	1,795 1,795
	3645 8875	4-p 7-p	Coupe Sedan	2,400 2,625
ĺ	3400	7-p	Road King Sedan	
)	KISSE	5-p	Sedanette	4,400
	2000		"55" Phaeton Std.	1.685
5	2980 8170	5-p 5-p	Phaeton DeLuxe	1,885
	3190 3530	5-p 2-p	Tourster Enc. Speedster	2,085 2,785
	3430 3530	4-p 5-p	Coupe Brougham	2,585 2,685
5	3530	5-p	Sedan	2,385
)	3530 3530	5-p 2-p	Victoria Enc. Speedster	2,685 2,785
0	8130 4070	2-p 7-p	Speedster Sedan	\$2,185 3,385
	4010	7-p NGTON	Berline Sedan	3,485
)	LEAL	10101	"Concord"	
,		5-p	Touring (Enc.)	\$1,495 1,595
		5-p 5-p	Spec. Touring	1,695
5		5-p	Sedan Minute Man"	2,085
5		2-p	Roadster	2,045 1,995
5		5-p 5-p	Touring Lark Touring	2,230
5		5-p 7-p	Cal. Touring Touring	2,295 2,095
		7-p 5-p	Cal. Touring Royal Coach	2,395
		5-p 5-p	Brougham	2,530
•		5-p	Sedan	4.000

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Prices and Weights of Current Passenger Car Models

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Ship. Wt. Pas LINCOLN	s. Body Style		Ship. Wt.	Pass.		Price		Pass	. Body Style	Price	Ship. Wt.	Pass.	Body Style "KLDH"	Price
4050 2-p		4,000	2145	2-p	"30" Roadster	\$875	2815	8-p	"C" Sp. Roadster	#1 CAE	3600	8-p	Roadster	\$2,450
4290 7-D 4215 4-D	Phaeton	4,000	2270	2-p	Sp. Roadster	985	2880	5-p	Sp. Touring	\$1,645 1,595	3700 3950	8-p 5-p	Sp. Roadster Sp. Touring	2,765 2,790
4380 5-D	Coupe Sedan	4,600	2200 2360	5-p 5-p	Touring Sp. Touring	875 1,015	\$050 \$160	4-p	Coupe	2,095	4100	7-p	Touring	2,640
4875 4-D 4600 5-D	Sedan	4,900	2330	2-p	Bus. Coupe	1,045	9100	5-p	Sedan "A"	2,195	4050 4200	5-p	Touring	3,115
4660 7-D		5,100 5,300	0.4.00	5-p	Coach	1,065	3326	4-p	Sport Phaeton	2,195	4300	4-p 4-p	Coupe Sp. Coupe	2,990 3,250
4720 7-p		3,344	2460 2410	4-p 5-p	Coupe Coach	1,175 1,065	3440 3585	4-p 5-p	Coupe Sedan	2,695 2,795			"693-4"	0,200
LOCOMOB	"48"		2570	5-p	Sedan	1,250	ROAM	IER			3250			
5080 4-p	Sportif Tour.	\$7,400	2740	5-p	DeLuxe Sedan	1,350	8100	"6-54- 2-p	E" (118 in. W. B.) Roadster	\$2,685	3350	3-p 5-p	Roadster Touring	\$2,195 2,195
5330 7-p 5600 5-	Touring Victoria Sedan	7,400 9,990	OVER				8100	4-p	Tourer	2,485	3750	5-p	Sedan	2,850
5464 7-P	Brougham	9,990	1769	"91" (1 2-p	100 in. wheelbase) Roadster		3300	4-p 7-p	Sp. Touring Touring	2,750 2,685			"695"	
5640 7-D 5868 7-D	Tour. Limousine Encl. Drive Lim.	9,000	1863	5-p	Touring	\$530 530		8-p	Cabriolet	3.285	3900 3950	5-р 7-р	Sportster	\$2,850
5868 7-D 5624 7-D		10,250	1918	5-p	Touring DeLuxe	595	4100		E" (138 in. W. B.)		4150	5-p	Touring Sedan	2,885 3,600
McFARLA	N		2177 2130	2-p 5-p	Coupe Sedan	695 850	4200	5-p 7-p	Spec. Sedan Suburban-Sedan	\$4,250 3,950	4350 4450	7-р 7-р	Sedan	3,750
MCI III	"6" TV		2004	5-p	Coupe Sedan	585	8650	4-p	"4-75-E"				Berline	3,850
4600 2-p		\$5,400	PACK	ARD				_	Sport "4-85-E"	3,650	TEMP	LAR		
4600 4-p 4700 7-p		5,600 5,700		"6"	(126 in. W. B.)		3200	2-p	Spec. Speedster	3,785	8300 3300	4-p 5-p	Suburban Tour. Phaeton	
4900 4-D	Coupe	6,720	8165 8320	4-p 5-p	Roadster Touring	\$2,785 2,585	ROLL 2300	IN 5-p	Touring	\$995	0000	5-p	Sedan	1,985 2,785
5200 4-p 5200 7-p	Tour. Sedan Tour. Sedan	6,720 6,810	8255	4-p	Sp. Touring	2,750	2315	3-p	Coupe Roadster	1,195		4-p	Brougham	2,650
5200 7-p	Sp. Sedan	6,600	8400 8515	4-p 5-p	Coupe Coupe	3,275	2485	5-p 5-p	Spec. Coupe Sedan	1,395 1,295	VELIE	3	"56"	
5200 7-p 5100 7-p	Sub. Sedan Limousine	7,000 6,900	8565	5-p	Sedan	3,450 3,375	2400	5-p	Spec. Sedan	1,550	2780	5-р	Touring	\$1,095
6200 7-D		9,000	8610	5-p	Sedan Limousine	3,425	ROLL	S RO	YCE		3110	5-p 5-p	Sedan	1,595
	"Light 6" SV	\$2,600	8430		(133 in. W. B.)	** ***			10,895. Prices o		-	0-D	Royal Sedan	1,895
8700 8-p 8700 5-p	Roadster Touring	2,600	8690	7-p 7-p	Touring Sedan	\$2,785 3,625			be obtained fro field, Mass.	m rac-	2840	5-р	Touring	\$1,250
\$850 4-p	Coupe	3,100	8765	7-p	Sedan Limousine	3,675	STAN				3025	5-p	Club Phaeton	1,425
4850 5-p 8900 7-p	Sedan Sedan	3,100			(136 in. W. B.)		8770		"740" Phaeton	\$2,750	3340 3100	5-6 5-p	Royal Sedan Sedan	1,925
MARMON	"74"		8880 8990	4-p 5-p	Runabout Touring	3,850 3,650	8910	5-p 7-p	Phaeton	2,750	3083	5-p	Coach Sedan	1,675 1,425
3470 2-p		\$3,165	3930	4-p	Sp. Touring	3,800	4075	5-p	Sedan	3,585	WEST	COTT	"44"	
3575 5-р	Touring	3,165	4125 4200	4-p 5-p	Coupe Coupe	4,550 4,725	4170	7-p	Sedan	3,985	3050			
3690 7-p 3770 4-p	Phaeton Brougham Coupe	3,165	4270	5-p	Sedan	4,650	STAR 1700	2-p	Roadster	\$540	3150	5-p 5-p	Touring Spec. Touring	\$1,690 1,840
5-p	Coupe de Luxe	3,455	4275	5-p	Sedan Limousine	4,700	1790	5-p	Touring	540	3300	5-p	Brougham 3 d.	2,290
3970 5-p 5-p		3,295 3,775	4020	7-p	(143 in. W. B.) Touring	\$3,850	1800 1880	5-p 5-p	Touring FWB Spec. Touring	745 795		_	"48"	
4155 7-p	Sedan de Luxe	3,850	4275	7-p	Sedan	4,900	1980	2-p	Coupe	750	3550 3650	7-p 7-p	Touring Spec. Touring	\$1,990 2,190
4000 5-p 4100 7-p			4350	7-p	Sedan Limousine	4,950	2115 2150	5-p 5-p	Sedan Spec. Sedan	820 1,090	0000	1-0	"68"	4,134
4100 7-p MAXWEL		0,010	PAIGE		Dhastan	\$1.895		-	KNIGHT		3300	5-р	Sedan	\$2,190
2135 2-p		\$885	8677 8742	4-p 7-p	Phaeton Phaeton	1,895		4-p	Coupe Roadster	\$1,795				42,100
2230 5-р		895 1,055	8880 4300	4-p 7-p	Phaeton DeLuxe	2,095 2,895	8775	5-p	Touring	1,595		SAL	NTE CLAIRE	
				(-D	Sub. Limousine	2,890	4050	5-p		2,095				
2410 5-p 2280 2-p		1,025	8900	5-p	Brougham 4 d.		4250		Sedan				(121 in. W. B.)	
2280 2-p 2480 5-p	Club Coupe Club Sedan	1,025 1,095		5-p 7-p	Brougham 4 d. Sedan De Luxe	2,175 2,770	8750	4-p 5-p	Sedan Coupe Broughan Brougham		3240	8-p	Roadster	\$2,575
2280 2-p 2480 5-p 2570 5-p	Club Coupe Club Sedan Sedan	1,025 1,095 1,325	8900	5-p 7-p	Sedan DeLuxe	2,175	8750	4-p 5-p	Coupe Brougham Brougham "6"	1,895 2,095				\$2,575 2,475
2280 2- p 2480 5- p 2570 5- p 2785 5- p	Club Coupe Club Sedan Sedan	1,025 1,095	8900 4285 PEER	5-p 7-p LESS	Sedan DeLuxe	2,175 2,770	8750 8775	4-p 5-p 5-p	Coupe Brougham Brougham "6" Touring	1,895 2,095 \$2,395	\$240 \$320 \$460 3630	8-p 5-p 4-p 7-p	Roadster Touring Coupe Sedan	\$2,575 2,475 3,275 3,475
2280 2-p 2480 5-p 2570 5-p	Club Coupe Club Sedan Sedan	1,025 1,095 1,325	8900 4285 PEER 8050 8175	5-p 7-p LESS 2-p 5-p	"6-70" Roadster Touring	2,175 2,770 \$2,350 2,285	3775 3850 4025	4-p 5-p 5-p 7-p 2-p	Coupe Brougham Brougham "6" Touring Touring Coupe	1,895 2,095 \$2,395 2,495 3,395	3240 3320 3460	8-p 5-p 4-p 7-p 5-p	Roadster Touring Coupe	\$2,575 2,475 3,275 3,475 3,575
2280 2-p 2480 5-p 2570 5-p 2785 5-p MOON 2440 4-p	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster	1,025 1,095 1,325 1,585	8900 4285 PEER: 8050 8175 3525	5-p 7-p LESS 2-p 5-p 7-p	"6-70" Roadster Touring Touring	2,175 2,770 \$2,350 2,285 2,485	3750 3775 3850 4025 4275	4-D 5-D 5-D 7-D 2-D 4-D	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe	1,895 2,095 \$2,395 2,495 3,395 3,150	3240 3320 3460 3630 3670 3500 3650	8-p 5-p 4-p 7-p 5-p 5-p 5-p	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850
2280 2-p 2480 5-p 2570 5-p 2785 5-p MOON 2440 4-p 2460 5-p	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring	1,025 1,095 1,325 1,585 \$1,295 1,195	8900 4285 PEER 8050 8175 3525 8550 3700	5-p 7-p LESS 2-p 5-p	"6-70" Roadster Touring	2,175 2,770 \$2,350 2,285 2,485 2,995 2,950	3775 3850 4025	4-p 5-p 5-p 7-p 2-p	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham	1,895 2,095 \$2,395 2,495 3,395	3240 3320 3460 3630 3670 3500 3650 3600	8-D 5-D 4-D 7-D 5-D 5-D 5-D 5-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850 3,850
2280 2-D 2480 5-D 2570 5-D 2785 5-D MOON 2440 4-D 2460 5-D 5-D 2605 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495	8900 4285 PEER 8050 8175 3525 8550	5-p 7-p LESS 2-p 5-p 7-p 5-p	"6-70" Roadster Touring Touring Sedan	2,175 2,770 \$2,350 2,285 2,485 2,995	3750 3775 3850 4025 4275 4275	4-p 5-p 7-p 2-p 4-p 7-p 5-p	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6"	\$2,395 2,495 3,395 3,395 3,150 3,395 3,200	3240 3320 3460 3630 3670 3500 3650 3600	8-p 5-p 4-p 7-p 5-p 5-p 5-p 5-p 5-p	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.)	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850 3,850
2280 2-D 2480 5-D 2570 5-D 2785 5-D MOON 2440 4-D 2460 5-D 2605 5-D 2755 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,695	8900 4285 PEER 8050 8175 3525 8550 3700	5-p 7-p LESS 2-p 5-p 7-p 5-p 5-p	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66	2,175 2,770 \$2,350 2,285 2,485 2,995 2,950 3,295	3750 3775 3850 4025 4275 4275	4-p 5-p 7-p 2-p 4-p 7-p 5-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring	1,895 2,095 \$2,395 2,495 3,395 3,150 3,395 3,200 \$1,875 1,875	3240 3320 3460 3630 3670 3500 3650 3600	8-D 5-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 6-D 6-D 6-D 6-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850 3,850
2280 2-D 2480 5-D 2570 5-D 2785 5-D MOON 2440 4-D 2460 5-D 5-D 2605 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495	8900 4285 PEER 8050 8175 3525 8550 3700 8900	5-p 7-p LESS 2-p 5-p 7-p 5-p 5-p 7-p	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton	2,175 2,770 \$2,350 2,285 2,485 2,995 2,950 3,295	8750 8775 8850 4025 4275 4275 8950	4-p 5-p 5-p 7-p 2-p 4-p 7-p 5-p 4-p 5-p 2-p	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe	1,895 2,095 \$2,395 3,395 3,150 3,395 3,200 \$1,875 1,875 2,185	3240 3320 3460 3630 3670 3500 3650 3600 3265 3335 3500	8-D 5-D 4-D 7-D 5-D 5-D 5-D 5-D **B-68** 4-D 5-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton	\$2,575 2,475 3,275 3,475 3,575 3,575 3,850 3,850 \$2,875 2,875 2,875
2280 2-D 2480 5-D 2570 5-D 2785 5-D MOON 2440 4-D 2460 5-D 2605 5-D 2755 5-D 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,695	8900 4285 PEER 8050 8175 3525 8550 3700	5-p 7-p LESS 2-p 5-p 7-p 5-p 7-p 4-p 7-p	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring	2,175 2,770 \$2,350 2,285 2,485 2,995 2,950 3,295	3750 3775 3850 4025 4275 4275	4-p 5-p 5-p 7-p 2-p 4-p 7-p 5-p 4-p 5-p 5-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring	1,895 2,095 \$2,395 3,395 3,150 3,395 3,200 \$1,875 1,875 2,185	3240 3320 3460 3630 3670 3500 3650 3600	8-D 5-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 6-D 6-D 6-D 6-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe	\$2,575 2,475 3,275 3,475 3,575 3,850 3,850 3,850 3,850 3,850 3,850
2280 2-D 2480 5-D 2785 5-D MOON 2440 4-D 2460 5-D 2605 5-D 2755 5-D 2760 5-D 2920 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Series "A" Roadster Sp. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan	1,025 1,025 1,325 1,325 1,585 1,585 1,195 1,270 1,495 1,695 1,785	3900 4285 PEER: 3050 3175 3525 8550 3700 3900 3980 4300 4355	5-p 7-p LESS 2-p 5-p 5-p 5-p 7-p 5-p 7-p	"6-70" Roadster Touring Touring Sedan Coupe Sedan **8"—66 Tour. Phaeton Touring Sedan Sedan	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 3,295 \$2,690 2,750 3,690 3,840	8750 8775 8850 4025 4275 4275 8950 ————————————————————————————————————	4-p 5-p 7-p 2-p 4-p 7-p 5-p 5-p 5-p 5-p 5-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Sport Coupe Coupe Brougham KNIGHT	1,895 2,095 \$2,395 2,495 3,395 3,150 3,395 3,200 \$1,875 1,875 2,185 2,285 2,475	\$240 \$320 \$460 \$630 \$670 \$500 \$650 \$650 \$650 \$650 \$650 \$650 \$65	8-p 5-p 4-p 7-p 5-p 5-p 6-p 6-p 7-p 4-p 5-p 7-p	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan	\$2,575 2,475 3,275 3,475 3,575 3,875 3,850 \$2,875 2,975 2,875 3,675 3,775 3,800
2280 2-D 2480 5-D 2785 5-D 2785 5-D MOON 2440 4-D 2460 5-D 2605 5-D 2755 5-D 2750 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan	1,025 1,095 1,325 1,585 1,585 1,195 1,270 1,495 1,695 1,785	8900 4285 PEER: 8050 8175 3525 8550 3700 3900	5-p 7-p LESS 2-p 5-p 7-p 5-p 7-p 5-p 7-p	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan	\$2,350 2,285 2,285 2,995 2,995 3,295 \$2,690 2,750 3,690	8750 8775 8850 4025 4275 4275 8950 STER 8200	4-p 5-p 7-p 2-p 4-p 5-p 5-p 5-p 5-p LING-	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring	1,895 2,095 32,395 2,495 3,395 3,150 3,395 3,200 31,875 1,875 2,185 1,285 2,475	3240 3320 3460 3630 3670 3550 3650 3650 3495 3625 3635 3570	8-D 5-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 7-D 4-D 5-D 7-D 5-D 5-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850 3,850 \$2,875 2,975 2,875 3,675 3,775 3,800
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2765 5-D 2760 5-D 2760 5-D 2760 5-D 2760 5-D 2920 5-D 3090 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Touring Sedan Metropolitan	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915	3900 4285 PEER: 3050 3175 3525 8550 3700 3900 3980 4300 4355 4430	5-D 7-D LESS 2-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Edan Sedan Edan Berline Victoria Coupe	2,175 2,770 \$2,350 2,285 2,485 2,995 2,995 3,295 \$2,690 3,690 3,690 4,090	3775 3850 4025 4275 4275 3950 ————————————————————————————————————	4-p 5-p 7-p 2-p 4-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 7-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring	1 1,895 2,095 32,395 2,495 3,395 3,395 3,200 31,875 2,185 n 2,285 2,475 2,150 2,150 2,150 2,150 2,150	8240 8320 8460 8630 8650 8650 8650 8650 8650 8495 8635 8625 8635 8670 8710	8-D 6-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 7-D 4-D 7-D 5-D 7-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine	\$2,575 2,475 3,275 3,475 3,575 3,875 3,850 \$2,875 2,975 2,875 3,675 3,775 3,800
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2760 5-D 2760 5-D 2760 5-D 2760 5-D 2860 5-D 3120 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915	3900 4285 PEER. 3050 3175 3525 8550 3700 3900 4355 44300 4355 4430 PIERO	5-D 7-D 7-D LESS 2-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Sedan Sedan Berline Victoria Coupe ROW "33"	2,175 2,770 \$2,350 2,285 2,485 2,495 2,950 3,295 3,295 3,295 3,690 4,090 3,390	3775 3850 4025 4275 4275 3950 ————————————————————————————————————	4-p 5-p 7-p 2-p 4-p 7-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster	1 1,895 2,095 32,395 2,495 3,395 3,395 3,395 3,200 31,875 1,875 2,185 2,256 2,475 32,256 2,475	3240 3320 3460 3630 3670 3550 3650 3650 3495 3625 3635 3570	8-D 6-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 7-D 4-D 7-D 5-D 7-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine	\$2,575 2,475 3,275 3,475 3,575 3,375 3,850 3,850 \$2,875 2,975 2,875 3,675 3,775 3,800
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2460 5-D 2605 5-D 2755 5-D 2760 5-D 2760 5-D 2860 5-D 2860 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Fetite Sedan Metropolitan Touring Sedan Sedan Sedan Sedan Sp. Sedan	1,025 1,025 1,325 1,325 1,585 \$1,295 1,195 1,295 1,495 1,695 1,785 1,495 1,815 1,915	8900 4285 PEER: 8050 8175 8175 8175 8250 8900 4300 4300 4300 4300 4355 4430 4130 PIERC	5-D 7-D LESS 2-D 5-D 5-D 5-D 7-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan Tour. Phaeton Touring Sedan Touring Touring Sedan Row Sedan Reding Sedan Reding Sedan Reding Row "33" Runabout	2,175 2,770 \$2,350 2,285 2,285 2,950 3,295 \$2,690 2,750 3,690 3,890 3,390 \$5,250	87750 8775 8850 4025 4275 4275 3950 8200 8235 3300 3200 3450	4-D 5-D 7-D 2-D 4-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan	1 1,895 2,095 2,495 3,395 3,195 3,395 3,395 3,200 31,875 1,875 1,875 2,285 2,475 32,256 2,150 3,100 2,800 3,100	3240 3340 3460 3630 3670 3650 3650 3650 3495 3625 3635 3635 3635 3635 3635 3635	8-p 5-p 4-p 7-p 5-p 5-p 5-p 7-p 5-p 7-p 5-p 7-p 5-p 7-p 5-p 7-p 5-p	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Brougham Brougham Limousine IGHT "64"	\$2,575 2,475 3,275 3,475 3,375 3,850 3,850 2,975 2,975 2,975 3,675 3,675 3,773 3,800 3,990
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2765 5-D 2760 5-D 2920 5-D 2920 5-D 3090 5-D 2860 5-D 3120 5-D 3120 5-D 3270 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Touring Sedan Sedan Petite Sedan Metropolitan Touring Sedan Sp. Sedan London Sp. Touring	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915	3900 4285 PEER: 3050 3175 3525 3525 3520 3900 3900 3980 4300 4355 4430 4130 PIERC 4350 4590 4780	5-D 7-D LESS 2-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 4-D 7-D 4-D 7-D 4-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Eerline Victoria Coupe ROW "33" Runabout Touring Coupe	2,175 2,770 \$2,350 2,285 2,485 2,995 3,295 3,295 \$2,690 4,090 3,390 \$5,250 6,800	3775 3850 4025 4275 4275 3950 STER: 3200 3235 3300 3450 3450	4-p 5-p 7-p 2-p 4-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham	1 1,895 2,095 2,495 3,395 3,195 3,395 3,200 31,875 1,875 2,185 2,185 2,255 2,475 2,250 2,180 2,180 2,185 2,475	8240 8320 8460 8630 8650 8650 8650 8650 8650 8495 8635 8625 8635 8670 8710	8-D 6-D 4-D 7-D 5-D 5-D 5-D 6-D 6-D 7-D 4-D 7-D 5-D 7-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine	\$2,575 2,475 3,275 3,475 3,575 3,850 3,850 3,850 \$2,975 2,975 2,975 2,975 3,675 3,675 3,775 3,800 8,990
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2460 5-D 2785 5-D 2780 5-D 2800 5-D 2800 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Petite Sedan Touring Sedan Touring Sedan Touring Sedan Touring Sedan Touring Sedan Sp. Sedan London Sp. Touring	1,025 1,025 1,325 1,325 1,585 \$1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915 1,515 1,995 2,095	3900 4285 PEER 8050 8175 8555 8550 3700 3900 8980 4300 4355 4430 4130 PIERC 4350 4590 4780 4830	5-D 7-D 1-D 5-D 5-D 5-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe	2,175 2,770 \$2,350 2,285 2,285 2,950 3,295 3,295 3,295 3,840 3,840 3,840 4,900 3,390	3775 3850 4025 4275 4275 3950 STER 3200 3235 3300 3450 3550 STEV	4-p 5-p 7-p 2-p 4-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5	Coupe Brougham Brougham "6" Touring Touring Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Broughan Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham DURYEA	1 1,895 2,095 32,395 2,495 3,395 3,150 3,395 3,200 31,875 1,875 2,185 2,256 2,475 2,475 32,250 2,475 2,475 2,475	3240 3340 3460 3630 3650 3650 3650 3655 3335 3625 3635 3635 3635 3635 3635	8-D 6-D 7-D 5-D 5-D 5-D 6-D 7-D 4-D 7-D 7-D 7-D 7-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe	\$2,575 2,475 3,275 3,475 3,375 3,850 3,859 \$2,875 2,975 2,975 2,875 3,675 3,675 3,775 3,800 8,990
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2760 5-D 2760 5-D 2920 5-D 3090 5-D 2860 5-D 3120 5-D 3120 5-D 3270 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Touring Sedan Touring Sedan Loudon Sp. Sedan London Sp. Touring Petite Sedan	1,025 1,025 1,325 1,585 \$1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915 1,515 1,995 2,095	3900 4285 PEER: 8050 8175 8175 8150 83900 8980 4300 4300 4300 4355 4430 4130 PIERC 4350 4590 4780 4830 4960 4750	5-D 7-D LESS 2-D 5-D 5-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Coupe Sedan Coupe Sedan	2,175 2,770 \$2,350 2,285 2,285 2,485 2,950 3,295 3,295 3,690 3,840 5,250 6,900 7,000 6,900	3750 3775 3850 4025 4275 4275 4275 3950 STER 3200 3235 3300 3250 3450 STEV 4200 4400	4-p 5-p 7-p 2-p 4-p 7-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Foort Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham DURYEA Roadster Touring	1 1,895 2,095 32,395 2,495 3,395 3,195 3,395 3,200 31,875 1,875 2,185 2,475 2,475 2,400 2,150 2,400 2,800 2,750 38,150 7,500	3240 33460 3630 3670 3500 3660 3600 3265 3335 3625 3635 3625 3635 3710 WILL 2681 2768 3062 3115	8-p 6-p 7-p 5-p 5-p 6-p 6-p 6-p 7-p 5-p 7-p 7-p 7-p 7-p 7-p 7-p 7-p	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe Sedan	\$2,575 2,475 3,275 3,275 3,575 3,575 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2785 5-D 2780 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Touring Sedan Fetite Sedan Metropolitan Touring Sedan London Sp. Sedan London Sp. Touring Petite Sedan **Special** Touring	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,495 1,915 1,515 1,915 1,915 1,955 2,095	3900 4285 PEER 8050 3175 3525 8550 3700 3900 3900 4300 4355 4300 4430 4430 4430 4430 44	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-P 7-D 4-D 7-D 4-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Sedan Sedan Sedan Sedan Sedan Ferline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Sedan Berline Touring To	2,175 2,770 \$2,350 2,285 2,285 2,950 3,295 3,295 2,750 3,840 4,390 4,390 5,250 6,800 6,900 6,900 6,800	8750 8775 8850 4025 4275 4275 8950 STER: 8200 3235 3300 8250 8450 8550 8450 85TEV 4200 4400 4250	4-D 5-D 7-D 2-D 7-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sedan Sedan Sedan Sedan Sp. Brougham DURYEA Roadster Touring Sp. Touring	1 1,895 2,095 2,495 3,395 3,395 3,395 3,395 3,200 31,875 1,875 1,875 2,185 2,185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,2185 2,218	3240 33460 3460 3670 3500 3650 3600 3495 3635 3625 3635 3710 WILL 2681 2768 3062 3115 3115	8-D 5-D 5-D 5-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan	\$2,575 2,475 3,275 3,275 3,575 3,575 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2755 5-D 2760 5-D 2760 5-D 2860 5-D 3120 5-D 3120 5-D 3120 5-D 3120 5-D 3270 5-D 3270 5-D 3890 5-D NASH	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Touring Sedan Fetite Sedan Metropolitan Touring Sedan London Sp. Sedan London Sp. Touring Petite Sedan **Special** Touring	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,815 1,915 1,515 1,995 2,095 1,985 2,540	8900 4285 PEER. 8050 8175 8555 8550 3700 3900 4300 4355 4430 4430 4750 4780 4780 4750 4750 4750 4750 4750 4750 4750 475	5-D 7-D 7-D 5-D 5-D 7-D 5-P 7-D 5-P 7-D 4-D 5-D 7-D 4-D 6-D 7-D 6-D 7-D 6-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Bedan Edan Edan Edan Edan Edan Edan Edan E	2,175 2,770 \$2,350 2,285 2,285 2,295 3,295 3,295 3,295 3,840 4,200 3,840 4,200 6,800 7,000 6,800 7,000	3775 3850 4025 4275 4275 3950 STER: 3200 3235 3300 3450 STEV 4200 4400 4400 4400 4600	4-p 5-p 7-p 2-p 4-p 7-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p 5-p 2-p	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Broughan sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham OURYEA Roadster Touring Sp. Touring Coupe Sp. Touring Coupe Sedan Sp. Brougham OURYEA	1 1,895 2,095 2,495 3,395 3,195 3,395 3,200 31,875 1,875 1,875 2,185 2,2185 2,2185 2,2185 2,2180 2,2180 2,180 2,180 2,185 2,185 2,175 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,18	3240 33460 3460 3650 3650 3650 3650 3495 3625 3635 3570 3710 WILL 2681 2683 3062 3115	8-D 5-D 7-D 5-D 5-D 5-D 5-D 6-D 7-D 4-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan	\$2,575 2,475 3,275 3,475 3,375 3,850 3,850 \$2,875 2,975 2,875 2,875 3,675 3,773 3,800 8,800 8,990
2280 2-D 2480 5-D 2785 5-D 2780 5-D 2860 5-D 2860 5-D 2860 5-D 2870 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan London Sp. Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Touring	1,025 1,025 1,325 1,585 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,495 1,915 1,515 1,915 1,915 1,955 2,095	3900 4285 PEER: 8050 8175 3525 8550 3900 3980 4300 4300 4355 4430 4130 4130 4750 4780 4750 4750 4850 5060 5060	5-D 7-D 7-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Sedan Sedan Fench Sedan Sedan Fench Fench French Lim. French Lim.	2,175 2,770 \$2,350 2,285 2,285 2,495 2,950 3,295 3,295 3,295 3,840 4,090 3,390 \$5,250 6,900 6,900 6,900 6,900 6,900 7,000	8750 8775 8850 4025 4275 3950 8200 3235 3300 3450 3550 3450 3550 8450 4200 4400 4450 4400 44600 4600 4600 4600	4-D 5-D 7-D 4-D 7-D 4-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 6-D 6-D 7-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Fouring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Sp. Touring Coupe Sedan Sp. Touring Coupe Sedan	1 1,895 2,095 2,495 3,395 3,195 3,395 3,200 31,875 1,875 1,875 1,875 2,475 32,250 2,475 32,250 2,475 3,100 2,800 2,750 88,150 7,500 7,700 9,675	3240 33460 3460 3650 3650 3650 3650 3650 3495 3625 3635 3635 3670 WILL 2681 2768 3062 3115 3111 3115 3167	\$-p-p-p-5-p-p-5-p-9-6-8" #B-68" 4-p-p-7-4-p-p-7-5-7 YS-N 2-p-p-9-4-p-p-9-5-p-p-9-5-p-p-9-5-p-p-9-5-p-p-9-9-9-9	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan Sedan DeLuxe "67"	\$2,575 2,475 3,275 3,475 3,375 3,850 3,850 3,850 \$2,875 2,975 2,875 3,675 3,675 3,778 3,800 8,990 \$1,275 1,295 1,795 1,550 1,650 1,995
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2755 5-D 2760 5-D 2860 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Sedan Touring Sedan Sedan Touring Touring Touring Touring Touring Touring Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.)	1,025 1,095 1,325 1,585 1,585 1,295 1,270 1,495 1,785 1,785 1,815 1,915 1,515 1,995 2,095 1,985 2,540	8900 4285 PEER. 8050 8175 8555 8550 3700 3900 4300 4355 4430 4430 4750 4780 4780 4750 4750 4750 4750 4750 4750 4750 475	5-D 7-D 7-D 5-D 5-D 7-D 5-P 7-D 5-P 7-D 4-D 5-D 7-D 4-D 6-D 7-D 6-D 7-D 6-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Sedan Sedan Sedan Sedan Sedan Sedan Sedan Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Limousine Enclosed Lim. French Lim. Landaulet	2,175 2,770 \$2,350 2,285 2,285 2,295 3,295 3,295 3,295 3,840 4,200 3,840 4,200 6,800 7,000 6,800 7,000	8750 8775 8850 4025 4275 4275 8950 STER: 8200 3235 3300 8250 3450 3550 3450 3550 4500 4400 4400 4600 4800 4800 4800 4800	4-D 5-D 5-D 7-P 1-D 4-D 1-D 1-D 1-D 1-D 1-D 1-D 1-D 1-D 1-D 1	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Sp. Touring Coupe Sedan Town Brougham Town Brougham Town Brougham	1 1,895 2,095 2,495 3,395 3,395 3,395 3,395 3,395 3,395 3,200 31,875 1,875 2,475 2,256 2,475 3,050 2,750 3,050 2,750 88,150 7,500 9,675 10,175	3240 33460 3460 3670 3500 3650 3600 3495 3635 3625 3635 3710 WILL 2681 2768 3062 3115 3115	8-D 5-D 5-D 5-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan	\$2,575 2,475 3,275 3,275 3,575 3,575 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2860 5-D 2860 5-D 3120 5-D 3120 5-D 3270 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Touring Fetite Sedan London Sp. Touring Petite Sedan "Sp. Sedan London Touring Touring Petite Sedan "Advanced" (121 in. W. B.) Roadster Touring	1,025 1,095 1,325 1,585 \$1,295 1,270 1,495 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295	3900 4285 PEER: 8050 8175 8525 8550 3900 8980 4300 4355 4430 4130 PIERC 4350 4580 4780 4780 4780 4780 4780 4780 4780 47	5-D 7-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Brougham Limousine Enclosed Lim. French Lim. Landaulet "80"	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 2,750 3,840 3,390 \$5,250 6,900 7,000 7,000 7,000 7,000 7,000 7,000	8775 8850 4025 4275 4275 3950 STER 3200 3235 3300 32550 3450 4400 4400 4400 4400 4800 4800 4800 4	4-D 5-D 7-D 7-D 7-D 4-D 5-D 4-D 5-D 5-D 5-D 6-D 6-D 6-D 6-D 6-D 6-D 6-D	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Broughan Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham URYEA Roadster Touring Coupe Sedan Town Brougham Vestibule Limou. Vestibule Limou.	1 1,895 2,095 2,495 3,395 3,395 3,395 3,395 3,395 1,875 1,875 2,475 2,475 2,475 2,400 3,100 2,800 2,750 3,050 2,750 88,150 7,500 7,750 9,675 10,175 9,675	3240 33460 3460 3630 3650 3650 3650 3495 3635 3635 3635 3635 3635 3635 3635 36	\$-D 5-P 5-P 5-P 5-P 5-P 7-P 5-P 7-P 7-P 7-P 7-P 7-P 7-P 7-P 7-P 7-P 7	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Sedan Coupe Sedan	\$2,575 2,475 3,275 3,475 3,575 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850 3,850
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2785 5-D 2886 5-D 288	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Touring Sedan Touring Sedan Touring Sedan London Sp. Touring Petite Sedan "Special" Touring Petite Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan	1,025 1,025 1,325 1,325 1,585 \$1,295 1,270 1,495 1,695 1,785 1,495 1,815 1,915 1,515 1,915 1,955 2,095 1,985 2,540 \$1,095 1,295 1,295 1,295 1,295 1,295 1,295 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915 1,915	3900 4285 PEER: 8050 8175 3525 8550 3900 3980 4300 4300 4355 4430 4130 4130 4750 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan	2,175 2,770 \$2,350 2,285 2,285 2,495 2,950 3,295 3,295 3,295 3,390 4,090 4,090 3,390 \$5,250 6,900 6,900 6,900 6,900 6,900 6,900 7,000 7,000 7,000 7,000 7,000 7,000 3,895	8750 8775 8850 4025 4275 4275 3950 8200 3235 3300 8200 4450 3450 3450 3450 4400 4400 4400 44	4-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Sport Coupe Coupe Brougham KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Town Brougham Town Brough	1 1,895 2,095 2,495 3,395 3,395 3,395 3,395 3,395 3,395 3,200 31,875 1,875 2,475 2,256 2,475 3,050 2,750 3,050 2,750 88,150 7,500 9,675 10,175	3240 33460 3460 3650 3650 3650 3650 3650 3495 3625 3635 3570 3710 WILL 2681 2768 3062 3115 3111 3115 3167	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Sedan Coupe Sedan	\$2,575 2,475 3,275 3,475 3,375 3,850 3,850 3,850 \$2,875 2,875 2,875 3,675 3,775 3,775 1,295 1,795 1,795 1,795 1,795 1,550 1,995
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2755 5-D 2760 5-D 2860 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Sedan Touring Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Sp. Sedan London Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced"	1,025 1,095 1,325 1,585 \$1,295 1,270 1,495 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295	3900 4285 PEER: 8050 8175 8175 8150 83900 8980 4300 4300 4305 4430 4130 4130 4130 4590 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Sedan Sedan	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 3,890 3,890 \$5,250 6,900 7,000 6,800 7,000 6,800 7,000 7,000 7,000 82,895 3,895 3,895	8750 8775 8550 4025 4275 4275 3950	4-D 5-D 5-D 7-D 4-D 5-D 4-D 5-D 4-D 5-D 5-D 4-D 5-D 5-D 6-D 6-D 6-D 7-D 7-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham DURYEA Roadster Touring Sp. Touring Coupe Sedan Sp. Touring Coupe Sedan Town Brougham Vestibule Limou. "4 Limousine Cabriolet ER	1 1,895 2,095 2,495 3,395 3,195 3,395 3,395 3,200 31,875 1,875 2,185 2,2185 2,2185 2,2185 2,2180 2,2180 2,180 3,050 2,750 2,180 3,050 2,750 9,000 10,175 10,175	3240 33460 3460 3630 3670 3500 3650 3650 3500 3495 3625 3570 3710 WILL 2681 2768 3062 3115 3111 3115 3167	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe S	\$2,575 2,475 3,475 3,475 3,475 3,850 3,850 \$2,975 2,975 2,975 3,675 3,775 3,800 8,990 \$1,275 1,295 1,770 1,795 1,650 1,995 1,425 2,095
2280 2-D 2480 5-D 2785 5-D 2780 5-D 2880 5-D 288	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" "Advanced"	1,025 1,025 1,325 1,325 1,325 1,585 1,295 1,270 1,495 1,695 1,785 1,495 1,495 1,915 1,515 1,915 1,955 2,095 1,985 2,540 81,095 1,295	3900 4285 PEER: 8050 8175 8555 8550 3900 8980 4300 4300 4305 4430 4130 4130 4750 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D	"6-70" Roadster Touring Touring Sedan Coupe Sedan Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 3,890 3,890 \$5,250 6,900 7,000 6,800 7,000 6,800 7,000 7,000 7,000 82,895 3,895 3,895	3750 3775 3850 4025 4275 4275 4275 3950 3200 3235 3300 3200 3450 STEV 4200 4400 4400 4400 4400 4800 4800 4800	4-D 5-D 5-D 7-D 4-D 5-D 6-D 6-D 6-D 6-D 6-D 6-D 6-D 6-D 6-D 6	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Touring Frougham KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sedan Sedan Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Coupe Sedan	1 1,895 2,095 2,495 3,395 3,195 3,395 3,395 3,200 31,875 1,875 2,2185 2,2185 2,2475 2,250 2,250 2,250 2,250 2,150 2,275 2,150 2,175 2,180 3,050 2,750 9,000 10,175 10,175 10,175	3240 33460 3460 3500 3650 3650 3600 3650 3495 3635 3625 3635 3670 WILL 2681 2768 3115 3115 3116 3116 3117 3059 3431	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan	\$2,575 2,475 3,275 3,275 3,575 3,575 3,850 3,850 \$2,975 2,975 2,975 3,675 3,775 3,800 3,990 \$1,275 1,295 1,779 1,795 1,550 1,995 Price \$2,340
2280 2-D 2480 5-D 2785 5-D 2880 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan Sp. Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,095 \$1,295 \$1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,525 2,290	3900 4285 PEER: 8050 8175 8175 8150 83900 8980 4300 4300 4305 4430 4130 4130 4130 4590 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 6-D 7-D 6-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Sedan Sedan	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 3,890 3,890 \$5,250 6,900 7,000 6,800 7,000 6,800 7,000 7,000 7,000 82,895 3,895 3,895	8775 8850 4025 4275 4275 3950 STER 8200 8235 3300 82550 8450 8450 4400 4400 4400 4800 4800 4	4-D 5-D 7-D 7-D 4-D 5-D 4-D 5-D 5-D 4-D 5-D 5-D 5-D 5-D 5-D 6-D 6-D 6-D 6-D 7-D 8-D 8-D 8-D 8-D 8-D	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham DURYEA Roadster Touring Sp. Touring Coupe Sedan Sp. Brougham URYEA Limousine Coupe Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring	1 1,895 2,095 2,495 2,495 3,395 3,395 3,395 3,395 1,875 1,875 2,475 2,155 2,475 32,256 2,150 2,400 3,100 2,800 3,100 2,800 3,100 2,800 3,100 2,750 88,150 7,500 7,750 10,175 10,175 10,175 10,175 10,175 11,145	3240 3320 3460 3630 3670 3500 3650 3650 3265 3355 3625 3625 3635 3670 WILL 2681 3111 3115 3111 31167 3059 3431 Weightham 1200 2200 2200 3415	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham Limousine IGHT "64" Roadster Touring Coupe Sedan Se	\$2,575 2,475 3,275 3,475 3,575 3,850 3,850 3,850 \$2,875 2,975 2,975 2,875 3,600 8,990 \$1,275 1,275 1,776 1,795 1,795 1,425 2,095 Price \$2,340 1,950 2,100
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2785 5-D 2860 5-D 2860 5-D 2870 5-D 287	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe 4 d	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,495 1,785 1,915 1,515 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,375 1,375 1,375 1,695	3900 4285 PEER: 8050 8175 8555 8550 3900 8980 4300 4300 4355 4430 4130 4130 4960 4780 4830 4960 4780 4750 4732 8385 8440 8172	5-D 7-D 1 LESS 2-D 7-D 5-D 7-D 7-D 4-D 7-D 4-D 7-D 4-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Brougham Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Enc. Drive Lim "T-6" Sta. Touring	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 3,890 3,890 3,890 \$5,250 6,800 6,900 7,000 6,800 7,000 6,800 7,000 7,000 7,000 82,895 3,895 3,895 3,895 4,045	8750 8775 8850 4025 4275 4275 3950 STER: 8200 3235 3300 3230 3450 3450 3450 3450 4400 4400 4400 44	4-D 5-D 5-D 5-D 6-D 7-D 14-D 9-D 14-D 9-D 14-D 9-D 14-D 9-D 9-D 14-D 9-D 9-D 9-D 9-D 9-D 9-D 9-D 9-D 9-D 9	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Sport Coupe Coupe Broughan Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sedan Sp. Brougham Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe	1 1,895 2,095 2,095 2,395 2,495 3,195 3,195 3,200 31,875 1,875 1,875 2,245 2,185 2,245 2,250 2,2400 3,100 2,750 2,800 3,050 2,750 3,100 9,675 10,175 10,175 10,175 10,175 11,145 1,495	3240 33460 3460 3630 3650 3650 3600 3265 3335 3500 3495 3625 3635 3570 WILL 2681 2768 3015 3111 3115 3167 3059 3431 Weighther and the second of the	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan Sedan Fougham Coupe Sedan Sedan Coupe Sedan Coupe Sedan Sedan Coupe Sedan Sedan Coupe Sedan Sedan Sedan Sedan Coupe Sedan	\$2,575 2,475 3,275 3,275 3,475 3,575 3,850 3,850 \$2,875 2,975 2,875 3,675 3,775 3,800 8,990 \$1,275 1,295 1,795 1,295 1,795 1,550 1,995 1,425 2,095
2280 2-D 2480 5-D 2785 5-D 2880 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Trav. Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Touring Fetite Sedan London Sp. Touring Petite Sedan "Sp. Sedan London Sp. Touring Petite Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe 4 d	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,095 \$1,295 \$1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,375 1,525 2,290	3900 4285 REO 3172 3182 2182 2182 2	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Sedan Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Sedan Sedan Sedan Sedan Sedon Sedan Sedon Sedo	2,175 2,770 \$2,350 2,285 2,285 2,485 2,950 3,295 3,295 3,295 3,295 3,840 4,090 3,390 \$5,250 6,800 6,900 6,900 6,900 7,000 7,000 7,000 7,000 7,000 3,395 3,895 3,895 3,995 4,045	3775 3850 4025 4275 4275 3950 3950 3230 3200 3450 3550 3450 STEV 4200 4400 4400 4400 4800 4800 4800 4800	4-D 5-D 5-D 5-D 6-D 7-D 6-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham OURYEA Roadster Touring Coupe Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sp. Sedan Special Six	1 1,895 2,095 2,495 2,495 3,395 3,395 3,395 3,395 3,395 1,875 1,875 1,875 2,475 2,185 2,475 32,256 2,150 2,400 3,100 2,8050 2,750 3,100 2,8050 2,750 4,000 3,100 1,750 1,0175 10,175 10,175 10,175 11,145 1,495 1,595	3240 33460 3460 3500 3650 3650 3600 3650 3495 3635 3635 3635 3670 WILL 2681 2768 3115 3115 3167 3059 3431 Weigh 4200 2200 3415 3590 3500	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Sedan DeLuxe "67" Touring Sedan AXICABS Make and Model Checker Driggs Elcar 4 Elcar 6 H.C.S. Kelsey E	\$2,575 2,475 3,275 3,275 3,575 3,575 3,850 3,850 \$2,975 2,975 2,975 3,675 3,773 3,800 3,990 \$1,275 1,295 1,795 1,795 1,550 1,995 Price \$2,340 1,950 2,160 2,450 1,980
2280 2-D 2480 5-D 2785 5-D 2880 5-D 3120 5-D 312	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan Sp. Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe 4 d 0 "6-54"	1,025 1,025 1,325 1,585 \$1,295 1,195 1,270 1,495 1,695 1,785 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,295 \$1,375 1,375 1,695 \$1,525 2,290 2,190	3900 4285 PEER 8050 8175 8555 8550 3900 8980 4300 4300 4355 4430 4130 PIERO 4350 4780 4780 4780 4780 4780 4780 4780 478	5-D T T S 2-D T T T T T T T T T T T T T T T T T T T	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Brougham Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Enc. Drive Lim "T-6" Sta. Touring Coupe Sedan Enc. Drive Lim	2,175 2,770 \$2,350 2,285 2,285 2,285 2,950 3,295 \$2,690 2,750 3,699 3,840 5,250 6,800 7,000 6,800 7,000 6,800 7,000 6,800 7,000 5,289 3,895 3,895 3,895 4,045	8750 8775 8850 4025 4275 4275 8950 87ER: 8200 3235 3300 8200 8450 4550 4500 4400 4400 4400 4800 48	4-D 5-D 7-P 7-D 4-D 7-P 7-D 4-D 7-P 7-D 7-P 7-D 7-P 7-D 7-P 7-P 7-D 7-P	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Touring Coupe Sedan Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sedan Sedan Sedan Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Special Six Roadster	1 1,895 2,095 2,395 2,495 3,195 3,195 3,200 \$1,875 1,875 1,875 2,475 2,255 2,475 2,255 2,475 3,100 2,750 \$8,150 7,750 9,675 10,175 10,175 10,175 10,175 10,175 10,175 10,175 10,175 11,495 1,495 1,495 1,595 \$1,450	3240 3320 3460 3630 3650 3650 3600 3265 3335 3500 3495 3625 3635 3570 3710 WILL 2681 2768 3062 3115 3115 3167 3059 3431 Weighthe 2200 3415 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3590 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 3690 369	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Touring Coupe Sedan Coupe Seda	\$2,575 2,475 3,275 3,275 3,475 3,575 3,850 3,850 3,850 \$2,975 3,675 3,875 3,800 3,990 \$1,275 1,295 1,795 1,550 1,995 1,425 2,995 Price \$2,345 1,995 2,1450 1,950 2,1450 1,950 2,1450 1,9285 2,450 1,9285
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2785 5-D 2860 5-D 2860 5-D 2860 5-D 3120 5-D	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan London Sp. Sedan London Sp. Touring Petite Sedan "Sp. Sedan London Sp. Touring Petite Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe 4 d "6-54" Roadster Sp. Roadster	1,025 1,095 1,325 1,585 \$1,295 1,270 1,495 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,375 1,375 1,695 \$1,375 1,695 \$1,195	3900 4285 PEER 8050 8175 85525 8550 3900 8980 4300 4355 4430 4130 PIER 4350 4590 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 8-D 7-D 7-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	"6-70" Roadster Touring Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Sedan Sedan Sedan Sedan Sedan Sedan Sedan Sedan Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Sedan Sedan Sedan Sedan Sedan French Lim. Landaulet "80" Sta. Touring Coupe Sedan Sedan Sedan Sedan Sedan Sedan Trouring Coupe Sedan	2,175 2,770 \$2,350 2,285 2,485 2,495 2,950 3,295 \$2,690 4,090 4,090 3,390 \$5,250 6,800 6,900 7,000 6,800 7,000 7,000 7,000 7,000 \$2,895 3,995 4,045	3775 3850 4025 4275 4275 3950 3950 3230 3200 3450 3550 3450 STEV 4200 4400 4400 4400 4800 4800 4800 4800	4-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham OURYEA Roadster Touring Coupe Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sp. Sedan Special Six	1 1,895 2,095 2,495 2,495 3,395 3,395 3,395 3,395 3,395 1,875 1,875 1,875 2,475 2,185 2,475 32,256 2,150 2,400 3,100 2,8050 2,750 3,100 2,8050 2,750 4,000 3,100 1,750 1,0175 10,175 10,175 10,175 11,145 1,495 1,595	3240 33460 3460 3500 3650 3650 3600 3650 3495 3635 3635 3635 3670 WILL 2681 2768 3115 3115 3167 3059 3431 Weigh 4200 2200 3415 3590 3500	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan Sedan Fougham Coupe Sedan Fougham Coupe Sedan Loupe Sedan Coupe Sedan Loupe	\$2,575 2,475 3,275 3,275 3,575 3,850 3,850 \$3,875 2,975 2,975 3,675 3,775 3,800 8,990 \$1,275 1,295 1,795 1,795 1,550 1,995 1,425 2,095 Price \$2,340 1,950 2,450 1,950 2,450 1,950 2,450 1,980 2,450 1,980 2,450 1,980 2,895 2,896 2,896 2,896 2,896
2280 2-D 2480 5-D 2785 5-D 2786 5-D 2880 5-D 3120 5-D 312	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan Petite Sedan Metropolitan Touring Sedan Touring Sedan Touring Sedan Sp. Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan "6-54" Roadster Sp. Roadster Touring Sedan Coupe 4 d "6-54" Roadster Touring	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,375 1,695 1,295 \$1,375 1,695 1,395 1,395 1,395 1,395 1,395 1,395 1,395 1,395 1,395 1,395 1,395 1,095 1,195 1,095	3900 4285 PEER 8050 8175 8555 8550 3900 8980 4300 4300 4355 4430 4130 PIERO 4350 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 7-D 5-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 8-D 7-D 7-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 7-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8-D 8	"6-70" Roadster Touring Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Lerine Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Brougham Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan	2,175 2,770 \$2,350 2,285 2,285 2,285 2,950 3,295 \$2,690 2,750 3,699 3,840 5,250 6,800 7,000 6,800 7,000 6,800 7,000 6,800 7,000 5,289 3,895 3,895 3,895 4,045	8750 8775 8850 4025 4275 3950 871ER 8200 8235 8300 8450 8450 8450 4400 4400 4400 4400 4800 48	4-D 5-D 7-P 7-D 4-D 7-P 7-D 4-D 7-P 7-D 7-P 7-D 7-P 7-D 7-P 7-P 7-D 7-P	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Special Six Roadster Touring Coupe Sedan Sedan Sedan Sedan Sedan Town Brougham	1 1,895 2,095 2,495 2,495 3,395 3,395 3,395 3,395 1,875 1,875 2,475 2,475 2,475 32,250 2,475 32,250 2,475 31,00 2,750 48,050 2,750 10,175 9,675 10,175 10,175 10,175 11,145 1,495 11,495	3240 33460 3460 3650 3650 3650 3650 3265 3335 3500 3495 3625 3635 3570 WILL 2681 2768 3062 3115 3111 3115 3167 3059 3431 Weighther with the second of the second	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Touring Coupe Sedan Coupe Seda	\$2,575 2,475 3,275 3,475 3,475 3,375 3,850 3,850 3,850 \$2,975 2,975 3,675 3,775 3,600 3,990 \$1,275 1,295 1,770 1,295 1,795 1,295 1,795 1,425 2,095 Price \$2,400 2,450 2,1850 1,925 2,896 2,350 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,1850 2,185
2280 2-D 2480 5-D 2785 5-D 2786 5-D 2886 5-D 3120 5-D 3120 5-D 3120 5-D 3120 5-D 3120 5-D 3270 5-D 327	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Petite Sedan Petite Sedan Touring Sedan Touring Sedan Petite Sedan Touring Sedan Touring Sedan Touring Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe 4 d "6-54" Roadster Touring Sedan Touring Sedan Coupe 4 d "6-54" Roadster Touring Sedan Touring Sedan Coupe 4 d Touring Sedan Coupe 4 d Touring Sedan Coupe 5 D Roadster Touring Sedan Coupe 4 d Touring Sedan Coupe 5 D Roadster Touring Sedan Coupe 6 D Roadster Touring Sp. Touring Landau Coupe	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,295 \$1,295	3900 4285 PEER 8050 8175 8175 8550 83700 8900 8980 4300 4355 4430 4130 4130 PIERC 4350 4590 4780 4780 4780 4780 4780 4780 8172 8182 8385 8675 REO 8172 8182 8385 8695 REVE	5-D 7-D 7-D 5-D 5-D 7-D 5-D 7-D 5-D 7-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Lerine Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Sedan Sedan Sedan Sedan Sedan Sedan Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Sedan Enc. Drive Lim "T-6" Sta. Touring Coupe Sedan Brougham 4 d. "M"	2,175 2,770 \$2,350 2,285 2,485 2,950 3,295 \$2,690 2,750 3,840 4,090 3,390 \$5,250 6,800 6,900 6,800 6,900 6,900 6,900 6,900 7,000 6,900 6,900 7,000 82,895 3,895 3,995 4,045	\$750 \$775 \$850 4025 4275 4275 \$950 \$235 \$3900 \$235 \$3900 \$3550 \$4500 4400 4400 4400 4400 4800 4800 4800	4-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Fouring Touring Sport Coupe Coupe Brougham Sp. Touring Phaeton Touring Coupe Roadster Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Special Six Roadster Touring Victoria Sedan Big Six	1 1,895 2,095 2,095 2,395 2,495 3,395 3,395 3,395 3,200 31,875 1,875 2,285 2,475 82,250 2,175 2,400 3,050 2,750 88,150 7,500 9,675 10,175 10,175 10,175 10,175 11,1495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1	3240 33460 3460 3500 36500 36500 3600 3600 3600 3600 3495 3635 3635 3635 3635 3670 3710 WILL 2681 2768 3062 3115 3115 3116 3167 3059 3431 Weightham 2200 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 385000 38500 38500 38500 38500 38500 38500 38500 38500 385000 38500 38500 38500 38500 38500 38500 38500 38500 385000 38500 38500 38500 38500 38500 38500 38500 38500 385000 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500 38500	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Coupe	\$2,575 2,475 3,275 3,275 3,475 3,575 3,850 3,850 3,850 3,850 3,875 2,975 3,675 3,675 3,775 3,675 3,775 1,295 1,795 1,795 1,550 1,995 1,425 2,495 Price \$2,340 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185
2280 2-D 2480 5-D 2785 5-D 2785 5-D 2785 5-D 2605 5-D 2765 5-D 2760 5-D 2860 5-D 3120 5-D 312	Club Coupe Club Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Enc. Touring Sedan 2 d Sedan 4 d Petite Sedan Newport Touring Sedan 7 Petite Sedan Metropolitan Touring Sedan Sp. Sedan London Sp. Touring Petite Sedan "Special" Touring Sedan "Advanced" (121 in. W. B.) Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan "Advanced" (128 in. W. B.) Touring Sedan "Advanced" (129 in. W. B.) Touring Sedan Touring Sedan Coupe 4 d D "6-54" Roadster Touring Sp. Roadster Touring Sp. Touring Landau Coupe Coupe	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 1,375 1,695 1,295 1,375 1,695 1,375 1,695 1,195 1,195 1,195 1,195 1,195 1,195 1,195 1,295 1,495	3900 4285 PEER: 3050 3175 3525 3525 3500 3900 3900 3900 3900 3900 3900 390	5-D 7-D 7-D 1 LESS 2-D 7-D 5-D 7-D 5-D 7-D 4-D 7-D 7-D 4-D 7-D 7-D 6-D 7-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 6-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Limousine Enclosed Lim. Landaulet "80" Phaeton Sedan Sedan Sedan Sedan Sedan Brougham Limousine Limousine Limousine Limousine Sedan	2,175 2,770 \$2,350 2,285 2,485 2,495 2,950 3,295 3,295 3,295 3,296 \$5,250 6,900 6,900 6,900 6,900 6,900 6,900 6,900 6,900 6,900 6,900 6,900 6,900 7,000 7,000 7,000 7,000 \$2,895 3,995 4,045	8750 8775 8850 4025 4275 8950 87ER 8200 3235 8300 8450 3550 8450 4200 4400 4400 4400 4400 4400 4800 800 800	4-D 5-D 7-D 4-D D 5-D D	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Sport Coupe Coupe Brougham Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sp. Brougham Sedan Sp. Brougham DURYEA Roadster Touring Coupe Sedan Town Brougham Vestibule Limou. % Limousline Cabriolet ER Standard Six Roadster Touring Coupe Sedan Special Six Roadster Touring Coupe Sedan Big Six Touring Coupe	1 1,895 2,095 2,195 2,495 3,395 3,395 3,395 3,395 3,395 3,200 31,875 1,875 2,285 2,475 32,250 2,175 2,400 3,100 2,050 2,750 88,150 7,500 2,750 10,175 9,675 10,175 10,175 10,175 11,495 1,495 2,050 1,495 2,050 1,495 2,150 1,495 2,150 1,495 2,150	3240 3320 3460 3630 3670 3500 3650 3650 3265 335 3625 3635 3625 3635 3625 3635 3625 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3635 3	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Sedan Brougham 4-D Limousine IGHT "64" Roadster Touring Coupe Sedan Coupe Sedan Coupe Sedan Sedan Belan Coupe Sedan Coup	\$2,575 2,475 3,275 3,275 3,275 3,575 3,575 3,850 3,859 \$2,875 2,975 2,875 3,672 3,600 8,990 \$1,275 1,275 1,275 1,770 1,795 1,795 1,295 1,425 2,895 2,450 1,950 1,925 2,895 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,180 2,185 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,895 2,8960 4,2550
2280 2-D 2480 5-D 2785 5-D 2786 5-D 2880 5-D 3120 5-D 312	Club Coupe Club Sedan Sedan Sedan Trav. Sedan Trav. Sedan Series "A" Roadster Sp. Touring Sedan 2 d Sedan 4 d Petite Sedan Petite Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Petite Sedan Touring Sedan Touring Sedan Touring Sedan "Advanced" (121 in. W. B.) Roadster Touring Sedan "Advanced" (127 in. W. B.) Touring Sedan Coupe Ge-54" Roadster Touring Sedan Coupe Coupe Sedan Coupe Coupe Sedan Sedan Coupe Sedan Coupe Sedan Sedan Coupe Sedan Sedan Coupe Sedan Sedan Sedan Coupe Sedan Sedan Sedan Sedan Sedan Sedan Coupe Sedan	1,025 1,095 1,325 1,585 \$1,295 1,195 1,270 1,495 1,495 1,785 1,495 1,815 1,915 1,515 1,995 2,095 1,985 2,540 \$1,095 1,295 \$1,295 \$1,295	3900 4285 PEER 8050 8175 8525 8550 3900 8980 4300 4300 4355 4430 4130 PIER 4350 4590 4780 4780 4780 4780 4780 4780 4780 478	5-D 7-D 8-S 2-D 5-D 7-D 5-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7-D 7	"6-70" Roadster Touring Touring Sedan Coupe Sedan "8"—66 Tour. Phaeton Touring Sedan Berline Victoria Coupe ROW "33" Runabout Touring Coupe Sedan Brougham Limousine Enclosed Lim. French Lim. Landaulet "80" Phaeton Sedan Enc. Drive Lim "T-6" Sta. Touring Sport Touring Coupe Sedan Brougham Limousine And Ander Sedan French Lim. Landaulet "80" Roadster	2,175 2,770 \$2,350 2,285 2,285 2,295 2,295 3,295 3,295 3,295 3,295 \$2,690 2,750 3,840 4,090 3,390 \$5,250 6,800 6,900 6,900 6,900 7,000 7,000 7,000 7,000 7,000 \$2,895 3,995 3,995 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875 1,875	3750 3775 3850 4025 4275 3950 3950 3230 3230 3450 3550 4400 4400 4400 4400 4800 4800 4800 4	4-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5-D 5	Coupe Brougham Brougham "6" Touring Coupe Sp. Coupe Sp. Coupe Sp. Sedan Brougham "Light 6" Touring Touring Touring Touring Touring Sport Coupe Coupe Broughan Sedan KNIGHT Sp. Touring Phaeton Touring Coupe Roadster Sedan Sedan Sedan Sp. Brougham Surry Sp. Touring Coupe Sedan Sp. Brougham URYEA Roadster Touring Coupe Sedan Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet ER Standard Six Roadster Touring Coupe Sedan Sp. Touring Coupe Sedan Sedan Sedan Sedan Town Brougham Vestibule Limou. % Limousine Cabriolet Sex Roadster Touring Coupe Sedan Special Six Roadster Touring Coupe Sedan Special Six Roadster Touring Special Six Roadster Touring Sedan Big Six Touring	1 1,895 2,095 2,095 2,395 2,495 3,395 3,395 3,395 3,200 31,875 1,875 2,285 2,475 82,250 2,175 2,400 3,050 2,750 88,150 7,500 9,675 10,175 10,175 10,175 10,175 11,1495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1,495 1	3240 3320 3460 3630 3650 3660 3660 3265 3335 3625 3635 3670 3710 WILL 2681 2768 3062 3115 3115 3115 3167 3059 3431 Weightham 15 3590 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850 3850	8-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD 5-DD	Roadster Touring Coupe Sedan Imperial Sedan Brougham Limousine Town Car (127 in. W. B.) Roadster Traveler Phaeton Coupe Sedan Coupe	\$2,575 2,475 3,275 3,275 3,475 3,575 3,850 3,850 3,850 3,850 3,875 2,975 3,675 3,675 3,775 3,675 3,775 1,295 1,795 1,795 1,550 1,995 1,425 2,495 Price \$2,340 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185 2,185

Current Passenger Car Specifications (This list comprises cars distributed on a national basis)

		TIE	RES				ENGIN	E						trical tem	Clutch	Gear-	Uni- versal Joints	REAR	AXLE	E BRAKES		S	Steer- ing Gear	Rear Springs
MAKE AND MODEL	Wheelbase (Ins.)	Standard Size (Ins.)‡	Balloon Equipment	Make	Model	Number of Cylinders, Bore and Stroke (Ins.)	Rated Horsepower, N.A.C.C.	Valve Arrangement	Piston Material	Number of Main Crankshaft Bearings	Oiling System	Carbureter Make	Ignition System Make	Generator and Starter Make	Type and Make	Make	Type and Make	Type and Make	Gear Ratio‡	Foot, Type and Location	Hand, Type and Location	Four-Wheel Brake, Type	Make	Type and Length
American	127 115 122 120 130 114 124	33x5	Yes Yes Yes* No Yes*	H-Sp Cont Cont Own Own Cont Lyc	91 7U 8R 6 8 7U H	6-31/2x5 6-31/8x41/4 6-33/8x41/2 6-31/8x41/4 8-31/4x5 6-31/8x41/4	29 . 40 23 . 44 27 . 34 23 . 44 33 . 80 23 . 44 31 . 25	L L L I L L L	CCCCCCC	*3 4 4 3 3 4 6	PS PC PC PS PS PC PC	Str Zen Zen Str Joh Str	A-K Wes Rem Rem Rem	G-D Wes Rem Rem Bij Rem	P-B&B P-B&B P-B&B P-Roc D-Own P-B&B P-	War Dur Dur Mec Mec W-G	M-Har F-Thi F-Uni M-Thi M-Thi M-Uni	F-Sal 1/2 Sal 3/4 Sal 1/2 Col 1/2 Own 1/2 Col	5.10 4.75 4.50 5.10 4.25 4.63	E-R E-R E-R E-R E-R E-R E-R	I-R E-T E-T I-R I-R E-T E-T	None Mec* Mec* Mec* Mec* Mec* Mec*	Lav Gem Gem Lav Own Jac	S-57½ S-58 S-58 J-48 J-48 S-57 S-57
Barley6-50 Buick"Standard" Buick"Master"	118 1143/8 (120 (128	32x4 31x4.7 32x5.7		Cont Own Own	7U Sta 6	6-31/6x41/4 6-3 x41/2 6-33/8x43/4	23.44 21.60 27.34	L I I	CCC	4 4 4	PC PS PC	Str Mar Mar	Del Del Del	Del Del Del	P-B&B D-Own D-Own	Ful Own Own	R-M&E M-Own M-Own	1/2 Col 3/4 Own F-Own	$5.11 \\ 4.90 \\ \{4.73 \\ 4.54$	E-R E-F E-F	I-R I-R I-R	None Mec Mec	Jac Jac Jac	S-56 V-48 V-47%
Cadillac. V-63 Case X Case JIC Case Y Chandler SS Chevrolet Superior	132 122 122 132 132 123 103	33x6.0 30x3½	Yes* Yes* Yes No	Own Cont Cont Cont Own Own		8-31/8x51/6 6-33/8x41/2 6-33/8x41/2 6-33/4x5 6-31/2x5 4-311/6x4	31.25 27.34 27.34 33.75 29.40 21.76	L L L L I	000000	3 4 4 4 4 3	PC PC PC PC PC PS	Own Seh Seh Seh Seh Zen Hol	Del Del Del Del Bos Rem	Del Del Del Del Bos Rem	D-Own D-Own D-Own D-Own P-B&B K-Own	Own Own Own Own Own Own	M-Spi R-Sne R-Sne R-Sne M-The M-Own	F-Own ½ Col ½ Col ¾ Col F-Own ½ Own	4.50 4.90 4.90 4.45 4.45 3.77	E-R E-R	I-R I-R I-R I-R I-R E-T I-R	Mec Hyd* Hyd* Hyd* Mec* None	Own Jac Lav Lav Own Own	N-54 S-55 S-54% S-57 S-58½ Q-28
Chrysler Six Cleveland 43 Cole Master Crawford 6-70 Cunningham V4	$ \begin{array}{c} 112^{3}4 \\ 115^{3}4 \\ 127 \\ 138 \\ \{132 \\ 142 \end{array} $	30x5.7 31x5.2 20x7.3 33x4½ 33x5	Yes Yes	Own Own Nort Cont Own	Six 43 311 6T V4	6-3 x434 6-31/8x434 8-31/2x41/2 6-35/8x514 8-33/4x5	21.60 23.44 39.20 31.54 45.00	L L L L	A C A C C	7 3 3 4 3	FP PC PC PC FP	Str Sch Sch Zen Str	Rem Bos Del Wes Del	Rem Bos Del Bos Del	D-Own P-B&B D-Nor D-B-L D-Own	Own Own Nor B-L Own	M-Own R-Sne M-Spi M-Spi R-Sne	12 Own 12 Own F-Col 12 Tim F-Tim	4.60 4.90 4.10 5.00 4.23	E-R	E-T E-T I-R I-R I-R	Hyd Mec* None None None	Jac CAS Gem Lav Gem	S-51½ S-53 S-57 S- J-62
Dagmar 6-70	138 138 115 118 116 132 115 134 121 109	33x5 33x5 31x1 32x41/2 30x5.7 32x5 31x4 33x5 32x41/2 31x4	No Yes* Yes* Yes* Yes* Yes* No No Yes*	Cont Own Cont Cont Own Own Fall Own H-Sp Cont	6T 24-38 7U 8R D 6-80 T8000 8 90 Spec	6-35/xx51/x 8-31/2x53/x 6-31/xx41/x 6-33/xx41/x 4-37/xx41/x 6-4 x5 6-31/xx41/x 8-27/xx5 6-31/2x5 4-37/xx41/4	31.54 39.20 23.44 27.34 24.03 38.40 23.41 26.45 29.40 24.03	L L L L I I I I I	C C C A C C A	4 3 5 5 3 7 3 3 3 3	PC PC PC PC PS PC PC PC PC PS	Zen Zen Str Str Ste Str Car Str Str Til	Wes Del Del Del N.E Bos Bos Del Wes A-L	Bos Del Del N.E Bos Bos Del Wes A-L	D-B-L P-Own P-B&B P-B&B D-Own D-Own D-Dtl P-Own D-B-L P-Own	B-L Own W-G W-G Own B-L Own Own B-L War	M-Spi M-Pet M-Pet M-Own R-Spi M-The R-Cli M-Spi M-Spi	1/2 Tim F Tim 1/2 Tim 1/2 Tim 1/2 Own 1/2 Tim 3/4 Fli 1/2 Own F Col 3/4 Ad	5.00 4.23 5.10 5.10 4.54 3.77 4.66 4.90 4.45 4.33	E-R E-F E-R E-R E-R I-F	I-R I-R I-R I-R I-R I-R I-R I-R I-R	None None Hyd Hyd None None Hyd None Mee*	Lav Ros Ros Own Ros Gem Lav Jac War	S-52 S-52 S-55 S-60 V-50 S-59 S-58 S-50½
Elcar 6-41 Elcar 6-51 Elcar 6-61 Elcar 8-80 Essex 6	112 113 118 127 110½	31x4 31x4 32x4 32x6.2 31x5.2		Lyco Cont Cont Lyc Own	CF 7U 8R H 6	4-35/8×5 6-31/8×41/4 6-33/8×41/2 8-31/8×41/4 6-2116×41/4	21.03 23.44 27.34 31.25 17.32	L L L L	A C C C C A	5 4 4 5 3	PC PC PC PS Sp	Zen Str Str Str Ste	A-L A-L Del Del Bos	A-L A-L Del Del Bos	P-B&B P-B&B P-B&B P-B&B D-Own	W-G W-G W-G Own	M-Mec M-Mec M-Har M-Spi] M-Spi	1/2 Sal 1/2 Sal 1/2 Sal 3/4 Sal 3/4 Sal 1/2 Own	4.70 4.70 4.70 4.71 5.60	E-R E-R E-F	E-T E-T I-R E-T I-R	Mec* Mec* Mec* Hyd None	Ros Ros Ros Ros Own	S-51 E-51 S-52 S-58 S-54 ¹ 2
Flint	120 100	30x5.2 32x4½ 30x3½	Yes* No	Cont Cont Own	Spec T	6-31/8x41/4 6-33/8x5 4-33/4x4	23.44 27.34 22.50	L L L	CCC	4 7 3	PC PC Sp	Til Str (Own Hol	A-L DeJ Own	A-L DeJ Own	P-Own P-Own D-Own	War War Own	M-Spi M-Spi M-Own	1/2 Ad 1/2 Ad 1/2 Own	4.77 4.77 3.63	E-R E-T	E-F I-R I-R	Mec* Mec* None	War War Own	S-50 S-54 O-43½
Franklin10 C GardnerSeries 5 Gray0	112	32x4 32x4 30x3 ¹ / ₂	Yes*	Own Lyc Own	CE R	6-314x4 4-314x5 4-358x4	25.35 21.76 21.03	I L L	A A C	5 3	PC PC Sp	Str Zen Sco	A-K Wes Wes	A-K Wes Wes	P-M&E ! P-B&B P-Own	Mec Det	M-Spi M-Pet R-Sne	1/2 Own 3/4 Fli 1/2 Tim	4.73 44.80 3.90	E-T I-R I-R	E-R I-R I-R	None None	Own Ros Own	E-38 S-51 Q-30
H.C.S. Series 4 H.C.S. Series 6 Hatfield 6-55 Haynes 50 Hudson Super 6 Hupmobile Series R	126 121 121 127	32x4 33x5.7 33x6.2	Yes* No Yes	Weid Own H-Sp Own Own	Spec 6 40 60 6 R	1-3 ³ 4x5 ¹ / ₂ 6-3 ¹ / ₂ x5 6-3 ¹ / ₄ x5 6-3 ¹ / ₂ x4 ³ / ₄ 6-3 ¹ / ₂ x5 4-3 ¹ / ₄ x5 ¹ / ₂	29.40	I L L L	CCCCAC	3 3 4 3	PS FP PS PS Sp PC	Str Str Str Ray Ste Str	Del Del Bos Kin Bos Wes	Del Del Bos L-N Bos Wes	D-B-L D-B-L P-B&B D-Own D-Own D-Lon	B-L B-L Dun Mec Own Own	M-Spi M-Spi M-Spi M-Thi M-Spi R-Own	1/2 Own 3/4 Own 1/2 Col 1/2 Own F Tim 3/4 Own	4.63 4.63 4.63 4.41 4.45 4.87	I-R E-R E-R E-R	I-R I-R I-R E-T I-R I-R	None None None None None	Gem Gem Jac Gem Ros	S-56 S-56 S-58 S-54\4 S-58 S-56\2
Jewett SR Jordan K&L Jordan "A"	120	32x4.9 32x4 32x41/2 32x6.2	Yes*	Own Cont	Spec Spec	6-314x5 6-316x434 8-3 x434	25.36 26.34 28.60	L L	CCC	3 4 5	PC PC	Ray Str	A-K Del Bos	Rem Del Bos	D-Lon P-Det	W-G Det	M-Mee M-Thi M-Thi	1/2 Tim 1/2 Tim 1/2 Tim	4.45 4.45 4.54	E-F	E-T I-R E-T	None Hyd Hyd	Gem Gem	S-54 S-5534 S-5534
KingL&K Kissel55	124	32x4½		Own Own	L	8-3 x5	28.80		C	3	PS	Bal	A-K	Wes	D-Det	Own	R-Uni	F Col	4.88		I-R	None	Jac	S-40 S-56
Lexington Concord Lexington . Minute Man Lincoln	119 123 136	32x4 32x5.2	Yes*	Anst Anst Own Own	55 M F 8 48	6-3 16 x 5 1/8 6-3 16 x 4 1/2 6-3 16 x 5 1/4 8-3 3/8 x 5 6-4 1/2 x 5 1/2	26.34 26.30 26.30 36.45 48.60	L	A C C A C	3 3 5 7	FP FP PC PC	Ray Ray Str Bal	Con Con Del Del	Rem Bos Bos Del Wes	P-B&B P-Lon P-Lon D-Own D-Own	W-G W-G Own	M-Spi R-Pic R-Sne M-Spi M-Spi	34 Tim 1/2 Sal 34 Sal F Tim F Own	4.42 4.70 5.10 4.58 3.50	E-R E-R E-R	E-T E-T I-R I-R	None None None Mec	Ros Ros Own Own	S-56 S-59 S-59/2 J-50
Marmon 34 Maxwell 26 McFarlan SV McFarlan TV	109 127	32x4½ 31x4 32x4½ 33x5	Yes*	Own Own Wis Own	34 25 Y TV	6-3 ³ 4x5 ¹ / ₈ 4-3 ⁵ / ₈ x4 ¹ / ₂ 6-3 ³ / ₈ x5 6-4 ¹ / ₂ x6	33.75 21.03 27.34 48.60	L	A A A	3 3 4	FP PS FP FP	Str Ste Ray Ray	Del Rem Del (Wes	Del Rem Wes Wes	D-Own P-Mec D-Lon D-M&E	Own Own W-G B-L	M-Spi M-Own M-Pet R-Sne	34 Own 12 Own 12 Tim F Tim	4.10 4.60 4.90 3.75	E-R E-F	I-R E-T E-T I-R	Mee* None Hyd Hyd*	Own Own Ros Ros	0-45 S-56 S-59 S-64
MoonNewport MoonMetropolitan MoonLondon MoonSeries A	118 128	31x5.2 31x5.2 32x6.2 30x5.2	Yes Yes	Cont Cont Cont Cont	7U 7C 8R 7Z	6-31/8x41/4 6-31/4x41/2 6-33/8x41/2 6-31/8x41/4	23.44 25.35 27.34 23.44	L L L L	0000	4 4 4 4	PC PC PC PC	Str Str Str Zen	Spi Del Del Del Del	Del Del Del Del	P-B&B P-B&B P-B&B P-B&B	W-G W-G B-L W-G	M-Spi M-Spi M Spi M-Spi	1/2 Tim 1/2 Tim 1/2 Tim 1/2 Tim	5.10 5.10 5.09 4.70	E-F E-F	E-T E-T I-R E-T	Hyd Hyd Hyd Hyd	Ros Ros Ros Ros	S-54 S-54 S-55 S-54
Nash"Advanced" Nash"Special"	{121 127 1121	33x6.0		Own Own	Adv Spe	6-31/4x5 6-31/8x41/2	25.35 23.44	I	C	3 3	PC PC	Mar Mar	Del Del	Del Del	P-B&B P-B&B	Own Own	M-Own M-Own	1/2 Own 1/2 Own	4.50		E-T E-T	Mec Mec	Gem Gem	S-56½ S-53½
Oakland	113 110 {100 106	31x4 .9 31x4 30x3 ¹ / ₂ 31x5 .2	Yes Yes* (No Yes	Own Own Own	6-54 30 91	6-2 ⁷ / ₈ x4 ³ / ₄ 6-2 ³ / ₄ x4 ³ / ₄ 4-3 ¹ / ₂ x4	19.84 18.15 19.60	L	B	3 3 3	PC PC Sp	Str Zen Til	Rem Del A-L	Rem Del A-L	P-Hoo P-B&B P-B&B	Mun Mun Own	M-Mec R-Own M-Own	1/2 Own 1/2 Own 1/2 Own 1/2 Own	5.10	E-F E-R	E-T E-T I-R	Mec None None	Jac Mun Own	S-52 ¹ / ₂ S-50 ³ / ₄ O-15
Packard 126&133 Packard 136&143	126	33x4 ¹ / ₃ 33x5		Own Own	8	6-33/8x5 8-33/8x5	27.34 36.45		C	9		Own Own	Del Del	Dyn Dyn	D-Own D-Own	Own Own	M-Spi M-Spi	1/2 Own 1/2 Own	4.66		I-R I-R	Mec Mec	Own	S-54 S-54

E-38

S-5614 S-5314

Now for Another Big WEED Christmas

ORE PAIR

TIRE CHAINS

TIRE CHAINS

PAT. JUNES 1818, JANAIA 1818

JUNY 10, 1922

WEED

DE LUXE

33X4½

CORD OR FABRIC

AREPANY TO JUNES 1818

WEED

CHAINS

"The Gift for Safety"

WEED CHAINS will link up your store with Christmas shopping. They make the ideal Chistmas gift—"The gift which Completely expresses the spirit of Christmas—good will to men and peace on earth that comes from SECURITY!"

"For a Merry Christmas and a Safe New Year" will be the compelling appeal of our full page WEED Chain advertisement in The Saturday Evening Post of December 6th.

And a beautiful lithographed Christmas door trim and special holly decorated WEED Bags in full colors, are yours for "Another Big WEED Christmas."

Ask your jobber.

AMERICAN CHAIN COMPANY

INCORPORATED BRIDGEPORT, CONN.

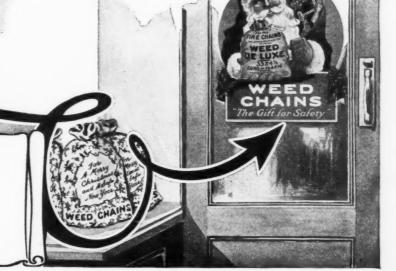
In Canada:
DOMINION CHAIN COMPANY, LIMITED, Niagara Falls, Ont.

District Sales Offices: Boston, Chicago, New York, Philadelphia, Pittsburgh, San Francisco

World's Largest Manufacturers of Welded and Weldless Chains for All Purposes



Above is shown the WEED Christmas Door Trim and how regular bags of WEED Chains are to be inserted in the special holly decorated Christmas Bags for display in your window.



No

Current Passenger Car Specifications

(This list comprises cars distributed on a national basis)

		TIR	ES				ENGIN	E					Elect Sys		Clutch	Gear- set	Universal Joints	REAR A	AXLE	BRAKES			Steer- ing Gear	Rear
MAKE AND MODEL	Wheelbase (Ins.)	Standard Size (Ins.)‡	Balloon Equipment	Make	Model	Number of Cylinders, Bore and Stroke (Ins.)	Rated Horsepower, N.A.C.C.	Valve Arrangement	Piston Material	Number of Main Crankshaft Bearings	Oiling System	Carburetor Make	Ignition System Make	Generator and Starter Make	Type and Make	Make	Type and Make	Type and Make	Gear Ratio‡	Foot, Type and Location	Hand, Type and Location	Four-Wheel Brake, Type	Make	Type and Length
Paige	126	33x4½ 33x6.2	Yes* Yes	Cont Own		6-3 ³ 4x5 6-3 ¹ 2x5	33.75 29.40	L L	C	4 7	PC PC	Ray Joh	A-K Del	Rem Del	D-Lon D-Own	W-G Own	M-Mec M-Spi	½ Tim	4.90 4.66	E-R E-F	I-R I-R	None Hyd	Gem Gem	S-61 ³ 4 S-54
Peerless			Yes* No	Own Own		8-314x5 6-4 x51/2	33.80 38.10	L T	C	3 7	PC FP	Bal Own	Del Del	Del Del	D-Own D-Own	Own Own	M-Soi M-Spi	34 Tim	4.90 4.29	E-R E-R	I-R I-R	Hyd* Mec*	Gem Own	S-60 S-
Pierce-Arrow "80"		32x5.7		Own	"80"	6-31/2x5	29.40	L	C		PC	Own	Del	Del	P-B&B	B-L	\R-Goo M-Spi	½ Tim	4.45	I-F	I-R.	Mec	Gem	S-5614
Reo			Yes	Own	Т6	6-3 ³ ₁₆ x5	24.34		A		PS	Seh	NE	NE	D-Own	Own	∫M-Own	½ Own	4.70	E-R			Own	8-/54%
Revere	117 121½	32x4½ 32x4 33x4½ 32x4½	Yes* Yes*	Mons Own Own Cont	A	4-43/8x6 6-31/8x43/4 8-3 x43/4	30.63 23.44 28.60 29.40	H L L L	A C C A	2 3 9 3	PS PC PC PS	Str Str Zen Str	Bos Bos Del Spl	Wes Bos Bos Wes	D-B-L D-Own D-Own P-B&B	B-L W-G W-G Ful	R-Own M-Spi M-Mec M-Mec R-M&E	34 Stn 12 Own 12 Own 34 Tim	3.44 4.63 5.10 4.60	E-R I-F I-F E-R	I-R E-T E-T I-R	Mee Mee	Gem Gem Gem Jac	S-58 S-57 S-59 V-55 ³ 4
Roamer	128 112	31x5.2		Dues Own Own	G1 G 40	4-41/4x6 4-31/4x41/2 6-41/2x43/4	28.90 16.90 48.60	L	A A A	3 4 7	FP PC FP	Str Til Own	Bos Con Bos	Wes Dyn "O"	D-B-L P-B&B K-Own	B-L Mun Own	R-M&E R-Sne M-Own	34 Tim 12 Sal F Own	4.63 5.10 3.72	E-R E-F I-R	I-R E-F I-R	Mec* Mec None	Jac Ros Own	V-55 ³ 4 O-46 ¹ 2 V-54 ¹ 2
Stanley	102 119	33x5.7 30x4.9 33x4½ 33x5	Yes	Own Cont Own Own	750 Spec Kni Kni	2-4 x5 4-31/8x41/4 1-33/4x55/8 6-31/4x5	13.00 15.63 22.50 25.35	X L X X	CCCC	2 3 4 4	PS PC PC	Non Til Sch Joh	Non A-L A-K A-K	Bij A-L A-L A-L	Non P-Own D-Own D-Own	Non War Own Own	Non M-Spi R-Cli R-Cli	1/2 Own 3/4 Ad 1/2 Own 1/2 Own	4.50 4.87 4.50 5.30	E-R E-R E-R E-R	I-R I-R I-R I-R	None Mec* Hyd* Hyd*	War Own Own	S-49 ¹ ₂ V-50 V-50
Sterling-Knight	125 138		Yes* No	Own Own	Kni G	$\begin{array}{c} 6 - 3 \frac{1}{4} x 45 \frac{4}{8} \\ 6 - 4 \frac{7}{16} x 5 \frac{1}{2} \end{array}$	25.35 47.25	X L	C	7 4	FP PS	Str Str	Wes Bos	Wes Bos	D-Ful D-B-L	Ful B-L	R-Cli M-Spi	1/2 Tim F Tim	4.66 3.76	E-R E-R	I-R I-R	Mee* None	Ros Ros	S-58 S-571 ₂
StudebakerSta. Six	113	31x5.2	Yes	Own	EM	6-33/8x41/2	27.34	L	C	4	PC	Str	{Wag Rem	Wag Rem	P-Own	Own	R-The	½ Own	4.60	E-R	I-R	Hyd*	Own	S-50
StudebakerSpec. Six	120	32x6.2	Yes	Own	EL	6-3½x5	29.40	· L	C	4	PC	Str	Wag	Wag	P-Own	Own	M-Spi	½ Own	4.36	E-R	I-R	Hyd*	Own	S-56
StudebakerBig Six		34x7.3	Yes	Own	EK	6-37/8x5	36.04		C	4	PC	Bal	Wag	Wag Rem	P-Own	Own	M-Spi	½ Own	3.69	E-R	I-R	Hyd*	Own	S-56
Stutz 693-4 Stutz KLDH Stutz 695	130	32x4½ 32x4½ 32x4½	No	Own Own Own	691 KLDH 691	H 6-3½x5 1-43,8x6 6-3½x5	29.40 30.63 29.40	T	CCC	3 3 3	PC PC PC	Str Str Str	Rem Del Rem	Rem Rem Rem	P-B&B D-W-G P-B&B	W-G Own W-G	M-Mec M-Har M-Mec	12 Tim 12 Own 12 Tim	5.10 3.75 4.90	E-R I-R E-R	I-R I-R I-R	None None Hyd*	Gem Gem Gem	S-61 ¹ / ₂ S-60 S-61 ¹ / ₂
Templar	122	33x4	No	Own		6-33/8x5	27.34	L	C		. PS	Til	Dyn	Dyn	P-M&E	W-G	R-Sne	³ 4 Sal	5.10	I-F	Е-Т	Mec	Ros	S-51
Velie60	118	31x5.2	Yes	Own	50	6-33x414	24.38	I	C	4	FP	Str	Wes	Wes	P-B&B	Mun	M-Thi	½ Own	5.10	E-F	E-T	Hyd	Ros	S-55
Westcott 48 Westcott 44 Westcott 60 Wills Ste, Claire. A&B68	$ \begin{bmatrix} 120 \\ 118 \\ 121 \\ 127 \end{bmatrix} $	$32x4\frac{1}{2}$ $32x4$ $32x4\frac{1}{2}$ $32x6.0$		Cont Cont Cont Own	12X 8R 8R (A68 (B68	6-3½x5¼ 6-3¾x4½ 6-3¾x4½ 8-3¼x4 4-3¼x4	33.80	L L I	A C C C	3 4 4 3	PC PC FP	Ray Str Str (Zen (Sch	Del Del Del Del	Del Del Del Del	P-B&B P-B&B P-M&E P-Own	B-L W-G W-G Own	M-Pet M-Pet M-Pet M-Spi	1/2 Tim 1/2 Col 1/2 Col 1/2 Eat	4.45 4.90 4.63 4.45	E-R E-R (E-R E-F	I-R E-T E-T (I-R I-R	Mec* Mec* Mec* None Hyd		S-59 S-571; S-56 (S-54) S-58
Willys Knight64&6	{118 124 {	33x4.9 33x5.7	Yes	Own	64	4-35/8x41/2	21.03		C	3 A T	1	Til	A-L	A-L	D-Own	Own	R-Own	34 Own	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	E-R	I-R	None	Own	S-55
		00-41		n.1	TE COLUMN	1 00 (81	22.50		Γ				A B		D D.1	n 1	701	24.00-1	4.07	n p				CI BHS
Checker	117	33x4½		Buda	WTU	1-334x51/8			C	3		Zen	Sci	Wes	D-Ful	Ful	Blo	34 Col	4.87	E-R	I-R	None	Jon	S-57%
Driggs		2 30x3½	Yes*	Own	CF	1-25/8x41/2	11.03		C	5	PS	Zen	Bos A-L	Bos A-L	D-Ful P-B&B	Ful W-G	Spi M-Mec	34 Own 1/2 Sal	4.74		I-R E-T	None Mon*	Own	S- S-51
Elcar		31x4 32x4	Yes*	Cont	8R	1-35/8x5 6-33/8x41/2			C			Str	Del	Del	P-B&B	W-G	Spi	34 Sal	4.75		I-R	Mec*	Ros Ros	S-51 S-52
KelseyE	112	32x4	No	Lyco	СН	1-x3½ 5	19.60	L	A	5	PC	Zen	Bos	Bos	P-B&B	W-M	M-Spi	¾ Sal	5.10	E-R	I-R	None	Lav	S-55
PennantAA		33x4½ 33x4½		Buda Buda	WTU		22.50	L	B		PC	Zen	Bos Bos	Wes Bos	D-Ful D-Ful	Ful Ful	Blo Blo	34 Col 34 Col	4.87 4.70	E-R	I-R I-R	None None	Jon Ros	S-57 S-57
Rauch & LangT Rauch & Lang** Reo	112 102 113	32x4 33x4½ 33x4½	No	Buda Own Own	WTU T-6	4-3 ³ / ₄ x5 ¹ / ₈ Electric 6-3 ³ / ₁₆ x5	22.50		B A		PC		Bos N-E	Dyn†	P-Det None D-Own	Det None Own	Spi Own Own	1/2 Sta Own 1/2 Own	5.10 8.60 4.70		E-T I-R	None	Gem Own	S-5914 S- S-55
Traveler	1081/	2 32x4	No	Buda	WTU	4-33/4x51/8	22.50	L	В	3	PC	Zen	Eis	Eis	D-T-L	W-M	Spi	Col		E-R	I-R	None	Gem	s-
White	119	34x4½ 32x4½		Own Own	64	. 4-3 ³ / ₄ x5 ¹ / ₈ 4-3 ⁵ / ₈ x4 ¹ / ₂		L	C	3	Sp PS	Zen Til	Opt A-L	Opt A-L	P-Own D-Own	Own Own	Own	1/2 Own 3/4 Own	5.12	E-R E-R	I-R I-R	None None	Own Own	J- S-55
YellowO-4 YellowA-2		32x4½ 29x4½		Cont Cont	V7 V7	4-3 ³ / ₄ x5 4-3 ³ / ₄ x5	22.50 22.50	L	C	3 3	Sp Sp	Zen Zen	Bos Bos	N-E† N-E†	D-B-L D-B-L	B-L B-L	Spi Spi	3/4 Tim 3/4 Tim	4.90 4.90	E-R E-R	E-T E-T		Gem Gem	56 56

ABBREVIATIONS-

ABBREVIATIONS—

**—Electric
†Generator only
*—At extra cost
‡—On Phaeton models
A—Aluminum
Anst—Ansted
Ad—Adams
A-K—Atwater-Kent
A-L—Auto-Life
B—Semi Steel
Bal—Ball & Ball
B & B—Borg & Beck
B-F—Both Internal and External
Four Wheels
Bij—Bijur
B-L—Brown-Lipe
Blo—Blood
Bos—Bosch
C—Cast Iron
Car—Carter
Cti—Climax
Col—Columbia
Con—Connecticut
Cont—Continental

D—Multiple Disc
Del—Delco
Det—Detroit
De J—De Jon
Dit—Ditwiller
Doo—Dooley
Dtl—Detlaff
Dues—Duesenberg
Dur—Durston
Dyn—Dyneto
E—Full Elliptic
E-F—External Four Wheels
E-R—External Transmission
Eat—Eaton
F—Full Floating
Fall—Falls
Fill—Flint
FP—Full Pressure to all bearings including wrist pins
Ful—Fuler
½ F—Semi-Floating
¾ F—Three-Quarter Floating
﴿ F—Head and Side
G—D—Gray & Davis
Gem—Genumer

G-L—Grant-Lees
Goo—Goodrich
H—Horizontal
Har—Hart
Hol—Holley
Hoo—Hoosier
H-Sp—Herschell-Spillman
Hyd—Hydraulie
I—In Head
I-F—Internal Four Wheels
I-R—Internal Rear Wheels
J-Three-Quarter Elliptic
Jac—Jacox
Jax—Jaxon
Joh—Johnson
Jon—Jones
K—Cone
Kin—Kingston
I.—L Head
Lav—Lavine
Lon—Long
L-N—Leece-Neville
Lyco—Lycoming
Mar—Marvel
M—Metal
M & E—Merchant & Evans

Mec—Mechanics
Mons—Monson
Mun—Muncie
N—Platform
Non—None
N. E.—North East
Nor—Northway
O—Special Type
Opt—Optional
P—Single Plate
PC—Pressure to all Crankshaft
and connecting rod bearings
Pen—Penfield
Pet—Peters
Ple—Pick
PS—Splash and Pressure
Q—Quarter Elliptic
R—Fabric
Ray—Rayfield
Rem—Remy
Roc—Ross
S—Semi Elliptic
Sal—Salisbury
Sch—Schebler
Sci—Scintilla

Sco—Scoe
Sne—Snead
Sp—Circulating Splash
Spe—Special
Spi—Spieer
Spi—Spieer
Spi—Spieer
Spi—Spier
Sta—Standard
Ste—Standard
Ste—Stewart
Str—Stromberg
T—T Head
The—Thermoid
Thi—Thiemer
Til—Tillotson
Tim—Timken
Uni—Universal
V—Cantilever
W-G—Warner Geat
W-M—Willys-Morrow
Wag—Wagner
Warner
Weid—Weidley
Wes—Westinghouse
Wis—Wisconsin
X—Sleeve
Zen—Zenith

and Length

Type

S-61³4 S-54 S-60 S-

S-5612

S-[54]₄ (55)₄ S-58 S-57 S-59 V-55³₄

V-553 O-461 V-541

3-58 3-571₂

3-50

3-56

5-56

-611 -60 -611₂

-54

-55

-55

57 5719

5914

55

55

STOP!

THINK!



READ THIS

SODS

THINK
What This Means
To YOU!

WIRE

For the Davis Proposition, in Your Territory

Watch for the Davis advertisement in *The Saturday Evening Post*, November 29, 1924, and others which will appear later.

GEO. W. DAVIS MOTOR CAR COMPANY, RICHMOND, INDIANA



No

3 mules (

Talk these Features and Boost Your Sales

Solid brass locknut prevents theft of Motometer or ornament. Small tongue in flange of locknut indents into space in cover and prevents Motometer turning out of alignment.

Lower gasket inside bottom of cap seals cap on radiator filler neck making it leak-proof.

Hole down through body of cap (in sume type this hole goes in through body of cap at back) to take the hollow headed set screw. The screw tightens against filler neck of radiator making absolute locking device. After tightening set screw with small wrench given with cap, a lead ball is driven into head of set screw preventing its being removed.

Bars are not ordinary round or tapered but decagon shaped (10 sided) extra strong and beautifully balanced and finished.

Hinge pins in thumb latch and cover are special alloy for strength and non-rusting. Each hinge is blind on one end so that pins cannot be driven out and parts stolen.

No sleeves or bushings—a solid cap for each car. This advanced design and improvement in Radiator Caps eliminates sleeve troubles—caps turning around, unsatisfactory locking sleeve devices, upper gasket troubles caused when gaskets are supposed to be held by sleeve attachments, and troubles caused by inaccurate fits of die-cast parts.

This tongue fits into thumb latch securely holding down cover to make cap leak-proof. When cap has been in use for time can tighten fit of cover by placing thin shim or piece of paper in groove under rubber gasket. This original design does away with all bushings and sleeves and unnecessary troublesome parts.

DELUXE

Solid rubber upper gasket seals cover when closed. Our design allows this gasket to give service and retains life of rubber—gasket is placed in recess in cover which is cool part of cap, thus preventing deterioration and abuse of gasket caused when gasket depends on sleeves or bushings and is squeezed into hot body of cap.

Bethlehem Caps are die-cast from special Bethlehem alloy—absolutely no steel parts used. Cannot rust or corrode. No bushings or sleeves to give trouble—a solid cap from special alloy allowing beautiful finish and design and extra strong to withstand more than ordinary usage. Retains lustre and finish.

Each cap is plainly numbered and indexed on a special printed directory making it casy to select the proper cap.

Thumb latch for tightening cover and holding initials or emblem. Graceful, original, beautiful design and mechanically correct—(patents applied). Owner's initial in silver and black finish, or fraternal emblem supplied for each cap.

Prism shaped finish to bottom of skirt of cap instead of plain casting giving beautiful balance design and finish.

BETHLEHEM

has done it

The same high quality at new low prices—

\$350 and

\$5

Large sizes \$5 Small sizes \$359

> Design, quality and features of both caps are identically the

The Bethlehem De Luxe Radiator Cap

Now—The Bethlehem De Luxe Radiator Cap is the lowest priced fine cap on the market. You can now talk price along with quality, beauty and special features. \$3.50—\$5.00. They are the new prices on the De Luxe Models of Bethlehem Caps.

Volume has done it. First place in volume of sales in the last 12 months has lowered our production costs.

We have passed this saving along. Which means—the same cap, the same quality—at an amazing new sales-making price.

Splendidly built, beautifully designed, extensively advertised, at the new low price, the Bethlehem is the best cap buy on the market. To the dealer this means rapid turnover, real profits. Write for full particulars.

THE BETHLEHEM SPARK PLUG CO.

BETHLEHEM, PA. E. H. SCHWAB, President

De Luxe Radiator CAPS

The BOSCH

SHOCK ABSORBER





BOSCH IGNITION SYSTEM FOR FORDS TYPE 600

Insures quick, easy starts, clear plugs, added power. Has automatic spark advance—is waterproof. Prevents all ignition troubles. Price \$12.75.



BOSCH ELECTRIC WINDSHIELD WIPER

An absolutely reliable automatic cleaner that is operated electrically. Not affected by engine speeds. Puts no burden on the battery. Price



BOSCH RED SPARK PLUGS

The big sure firing, gas tight plus with the unbreakable insulator and the real nickel electrodes. Get the genuine—it's red! Regular size \$1.00. Ford size 75c.

924

Long Line

When You Can't Sell Cars Sell Accessories—

Thousands of dealers who find it difficult to sell cars at this season can make substantial profits selling accessories.

They can not only maintain their sales force, but they can make it pay its way and in the meantime uncover many new "car prospects" and help their car sales, too—

Try this plan. Specialize on the Bosch Long Line—especially the Bosch Shock Absorber. It is a real necessity of recognized value and quality.

Wire the nearest Bosch Branch for a sample set at quantity prices C. O. D., and try them on the car you sell. That will enable you to demonstrate to yourself—and to your customers—what a wonderful improvement they make.

AMERICAN BOSCH MAGNETO CORP.

Main Office and Works-Springfield, Mass.

Branches: New

New York

BOSCH MAGNETO

FOR

Bosch High Ten Ignition for Fords coils and timer. I ignition troubles. rith or without rottle Governor. Pr

FORDSONS

Chicago

Detroit

San Francisco

DEALERS: Big advantages open to live dealers who can become Bosch Sales Agents and sell the Bosch Long Line of Automotive Necessities.



BOSCH DE LUXE IGNITION SYSTEM FOR FORDS TYPE 513

Includes the Bosch Coil, and Bosch Compensating Governor, which automatically advances and retards the spark to exactly meet the Ford engine's characteristics. Wonderfully efficient. Price, 335,00.



You don't have to stock a lot of special types and sizes. The 3 standard Bosch sizes enable you to equip all cars satisfactorily, whether equipped with balloon or high pressure tires.

PRICES PER PAIR

For Fords ______\$10

For Medium Cars \$1:

For Heavy Cars and Trucks...\$20
In Canada \$27.50.



BOSCH HIGH TENSION MAGNETO

The world's most dependent of the intion system—over four million in use today—in demand everywhere for use on cars, trucks, tractors, motoroycles, motor boats and stationary engines. Prices on request.

2236 Miles

A Startling Nation-Wide Demonstration of Motor Car Stamina, Speed and Economy

TERE is an unforgettable lesson in motor car values - as important to the man who sells as to the man who buys.

Competing for \$5,000 worth of prizes, scores of Cleveland Six dealers engaged simultaneously in a 48-hour non-stop economy run.

The results constitute the most magnificent exhibition of bull-dog stamina, of cyclonic speed, of operating economy ever given by any motor car.

The winner went 2,236.1 miles at an average speed of 46.5 m.p.h., averaging 28.3 miles to the gallon.

The eight leading entries covered an average of 2117.3 miles in 48 hours at an average speed of 44.1 m.p.h. and averaging 25.5 miles to the gallon.

And all 86 participating cars showed a grand average mileage of 1565 for the 48 hours; a grand average speed of 32.6 m.p.h. and a grand average economy of 21.4 miles per gallon!

These astounding records are not "stunt" records. They were not made with specially geared or stripped cars, on guarded speedways or with professional drivers at the wheel.

They were made in stock Cleveland Sixes-open and closed models-over every type of American road, under every conceivable road and weather condition.

All cars were driven by salesmen,

"One-Shot" Lubrication System

Every car participating in the non-stop run was equipped with the "One-Shot" Lubrication System.

How extensively this exclusive feature added to the amazing results, we are not prepared to say.

But we do know that every driver was able to keep all chassis parts perfectly lubricated at all times—simply by stepping on the plunger.

No squeaks. No species at the same and the

No squeaks. No punished bearings. And no grease guns or cans!

(The "One-Shot" Lubrication System is licensed under Bowen Products Co. patents.)

924

in 48 Hours

mechanics, executives and even stenographers.

Every car carried at least one passenger. Every motor ran 48 hours without stopping. Every car was officially observed. Every record was sworn to.

For the man who buys, these heroic achievements vividly demonstrate that the 1925 Cleveland Six ranks with the history-making cars—

—that it combines power, speed, stamina, economy, long life and inexpensive maintenance in a manner that is absolutely unique.

To the man who sells, they focus attention to one of those bright oppor-

tunities that now come so rarely in the automotive industry-

—an opportunity to align himself with a strong, aggressive, progressive organization—

—handling a car unparalleled in its sales appeal—

—working under a franchise that is broad, liberal and helpful.

Many territories, of course, are being adequately covered by able dealers. But there are still some left to be assigned to the right men when they can be found.

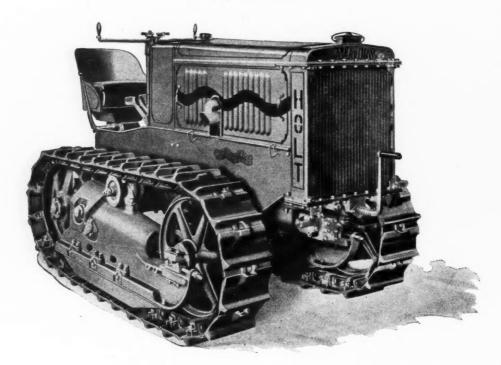
Every inquiry as to all franchise details will be promptly and fully answered.

CLEVELAND AUTOMOBILE COMPANY .

Export Department, 1819 Broadway, New York City C.

· CLEVELAND
Cable Address, "Cleveauto"





Fill Up the Valleys in Your Sales Curve

HOLT TRACK LINK

The track shoe and rails are an integral casting of specified analysis, high carbon cast steel. They are subjected to heat treatments in the Holt plant under the control of experienced workmen, to refine the structure of the metal and to increase the tensile strength and hardness value. The track links are subjected to two heat treatments. Upon completion of the last operation the physical values are as follows:

Tensile strength:

As cast, 50,000 lbs. After Holt Heat Treatment, 150,000 lbs.

Scierescope hardness:

As cast, 30 lbs. After Holt Heat Treatment, 40 to 50 lbs.

to 50 lbs.

Superior material and the longest life tracks are obtained from the use of correct steel castings, correctly heat treated. Holt Heat Treatment triples the original strength and increases the hardness about one and one half times.

Many automobile dealers are adding the "Caterpillar" to their present line.

They realize that the "Caterpillar" market is a year-'round market; that it helps to build up the low spots in their sales curves; low spots due to regular dull periods in automobile demand.

You're now selling transportation. In selling "Caterpillars," you sell a machine that is making more and better transportation possi-

Municipalities, counties, states; big engineering projects and road contracts; for snow removal; golf clubs, big industrial plants; mining, logging and oil field operations-each of these means a potential "Caterpillar" sale. It is a steady market; growing constantly and rapidly, as bankers, engineers, public officials, contractors and tax-payers recognize more and more clearly the "Caterpillar's" rugged dependability and versatil-

There is a "Caterpillar" of size and hauling capacity for everneed. The 2-ton is ideal for lighter hauling. The 5-ton and 10-ton are unexcelled for medium and heavy duty.

It will be worth your while to find out about our co-operative dealer plan.

Write us today.

There is but one "Caterpillar"—Holt builds it.

THE HOLT MANUFACTURING COMPANY, Inc. Peoria, Illinois Stockton, Calif.

Export Division--250 W. 54th St., New York, N. Y.





Keep the Cash Register Ringing This Winter

Don't get rust in your cash register—or cobwebs on its keys.

Take a tip from the ice companies—they sell coal in the winter. Sell comfort for automobiles—Perfection Heaters!

Everybody wants a heated car. And to nine out of ten, "heated car" just naturally means Perfection-heated. Never has there been such an opportunity to cash in on the demand for Perfection Heaters—known to the industry as the original and standard car heater—reasonably priced and fully guaranteed.

If you want a sure cure for the midwinter slump in business, clip the coupon below and mail it at once. Information will come by return mail.

COUPON

Perfection Heater & Mfg. Co. 6545 Carnegie Ave. · Cleveland, Ohio

Please send me your Perfection Heater sales and service proposition.

Name

Address ..

City.....State....

THE PERFECTION HEATER & MANUFACTURING CO., CLEVELAND, OHIO

Manufactured in Canada by Richards-Wilcox Canadian Co., Ltd., London, Ont.

The Swan Carburetor Co., manufacturers of the Swan System of Fuel Distribution, is a subsidiary of The Perfection Heater and Manufacturing Company.

PERFECTION HEATERS

THE HEAT IS THERE WHY NOT USE IT?





To Seat Valves Properly

—to get a good compression-tight job—it is necessary to ream out pits, carbon deposits or other irregularites from the valve seats before grinding in the valves. The best way to do this is with a Sioux Valve Seat Reamer. It is rapid cutting and ab-

solutely accurate. It faces the seat perfectly and at the proper angle. A few turns will cut a smooth clean face on the seat—making it easy to grind the valve to its seat and saving hours of tedious work.

Made of the best tool steel, treated to stand up on valve seat reaming. Ground with proper clearance on the cutting points. Can be had in all sizes—in any degree, 15, 30, 45, 50, 60, or 75.

No chattering if you simply insert a piece of 50 lb. wrapping paper, large enough to cover valve seat, on the pilot stem between reamer and valve seat. A few turns will cut thru paper.

Sioux Pilot Stems are accurately ground to fit perfectly.

T-Handle Extension Wrenches used in connection with Sioux PilotStems only. Sizes 3 in., 6 in. and 12 in.



Your Jobber Sells Them

ALBERTSON & CO. SIOUX CITY, IOWA







A safe investment.

The best known, easiest selling and most profitable spark plugs.

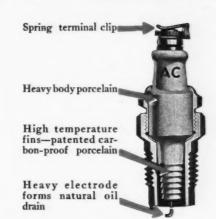
Backed up by the factory equipment business of more than 200 manufacturers.

Nationally advertised through magazines, newspapers, painted boards, store signs, window displays and direct advertising, which creates a big demand for them.

ACIO75 SPARK PLUGS

A good plug for Fords

The AC 1075 Spark Plug for Fords is a big seller and money maker.





SPEEDOMETERS



The quality of AC Speedometers is proven by the fact that they are equipment on BUICK, CHEVROLET, CHRYSLER, GRAY, HAYNES, LEXINGTON, MAXWELL, OAKLAND and OLDSMOBILE.

THE MODEL FOR FORDS

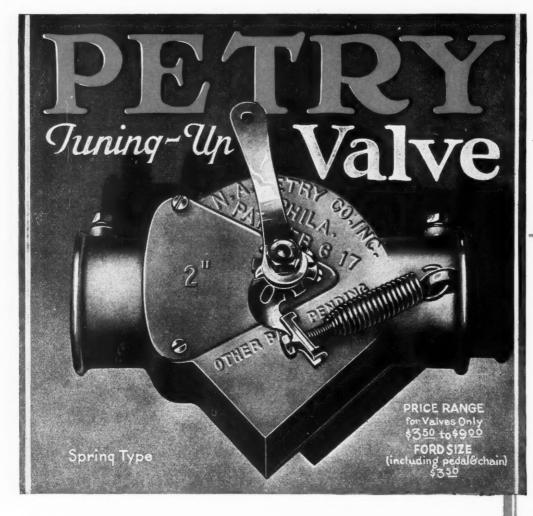
Complete with all attachments. The new AC Direct Drive has done away with the swivel joint. Easily sold because of their high quality and national advertising.

SELL AC PRODUCTS—THEIR QUALITY AND POPULARITY ASSURES DEMAND AND PROFIT

AC-SPHINX Birmingham ENGLAND AC Spark Plug Company, FLINT, Michigan

Makers of AC Spark Plugs—AC Speedometers
U. S. Pat. No. 1,135,727, April 13, 1915; U. S. Pat. No. 1,216,139, Feb. 13, 1917. Other Patents Pending

AC-OLEO Levallois-Perret FRANCE



Everlastingly Efficient and Easiest to Install

From whatever angle you view it—quality of construction—ease of installation—smoothness of operation—and freedom from rattle, leakage, and back pressure—the Petry Tuning-up Valve is undeniably the most convenient and efficient cut-out on the market.

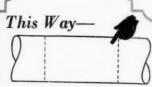
Two types available—the spring type as illustrated and the dash controlled type.

Dealers find these tuning-up valves are preferred by car owners because of their many desirable features.

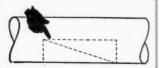
N. A. PETRY COMPANY, INC.

340 North Randolph Street, Philadelphia, Pa.

Pacific Coast Representative Norman Cowan Co., 451 Rialto Bldg., San Francisco, California



Installation is easier and quicker than this



One way you must saw and hack and file until you've made a square hole *into* the exhaust line. A difficult time consuming job.

But when installing a Petry Valve you just take two straight cuts through the exhaust pipe with a hack saw and remove an entire section.

Then you fit the deeply bored ends of the PETRY over the pipe ends and tighten the set screws. A quick, easy job.

The fit is so accurate that the exhaust line is just as rigid and gas-tight as the solid pipe.

In the SPRING TYPE PETRY the lever can be set at eight angles permitting the connection with the pedal, control lever, or dash control to be made in the most direct way.

Write for this Booklet

It explains in simple language the many technical reasons why every car should be equipped with a Tuning-up Valve.

Are you able to detect your motor troubles before they become too serious!

VISIBLE NIGHT and DAY

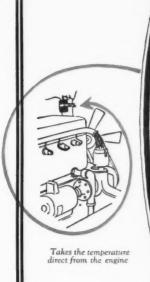
MOUNTED on the instrument board—the logical place for a motor heat indicator—Safe-T-Stat shows exact engine temperature night and day in any weather. It takes temperatures direct from the motor and registers them accurately regardless of weather or radiator conditions. Moreover, it is theft-proof and needs no lock.

SAFE-F-STAT

ENGINE HEAT INDICATOR

Always Accurate Theft-Proof

Do not confuse Safe-T-Stat with any other type of heat indicator actuated by vapor or by fluid or gas pressure systems. It is electrically controlled and is the one device that registers true temperatures of motors cooled by both thermo-syphon and pump systems.





SAFE-T-STAT is quickly installed. No tapping of the motor block is required. It operates indefinitely without adjustment or expense. One model fits all cars. If your jobber has not yet stocked Safe-T-Stat, write us direct.

The SAFE-T-STAT Co., Inc. PHILADELPHIA

PHILA

FACTORY
57th and Westminster Ave.

GENERAL OFFICES
Drexel Building



Why You Can Make Money Selling This Automobile

AN automobile nationally advertised, priced within reach of the masses, that sells easily and makes friends;

An automobile sold on a margin that enables the dealer to make a good profit on each sale;

An automobile that gives trouble-free performance during a long period of time, saving the dealer costly service expense and enabling him to retain his profits;

An aggressive organization that knows automobile merchandising and renders real assistance in the development of the dealer's business.

A selling agreement entirely fair to the dealer;

These are a few of many advantages enjoyed by Star dealers.

Star dealers are making money now and those who keep pace with the Star expansion program should increase their profits steadily for years to come.

The new policy of direct dealership has created many exceptional opportunities for automobile merchandisers.

For full information address the nearest wholesale office or plant.

DURANT MOTORS . INC .

Fisk Bldg., Broadway at 57th Street NEW YORK, N. Y.

STAR PLANTS AT ELIZABETH, N. J., LANSING, MICH., OAKLAND, CALIF., AND TORONTO, ONTARIO

Wholesale Offices at Elizabeth, N. J., Philadelphia, Pa., Atlanta, Ga., Boston, Mass., Chicago, Ill., Pittsburgh, Pa., Lansing, Mich., Cincinnati, Ohio, Dallas, Texas, St. Louis, Mo., Denver, Colorado, and Kansas City, Mo.

STAR MOTOR CARS

You Don't Have to Stock Special Balloon Tire Jacks~



AJAX AUTO PARTS CO., Dept. A511, Racine, Wis.

AJAX RED JACKS

Most Everyone Knows that Stabilators are Higher in Quality. But-

Many do not know they are so much lower than the average in price.

in price.





STABILATORS

There are devices which stop that

Only the rapid growth in popularity of Stabilators has made possible their low price, because even a casual examination of the material and workmanship will indicate that without volume production, higher prices than the average would be imperative.

OMPARISON of Stabilators

with the dozen leading devices

for easy riding, on a price basis

alone, proves that Stabilators, with

all their recognized superiority, are actually lower than the average

On the other hand, even the lower price would not justify your purchase of Stabilators were it not for the totally different principle they employ and the totally different results they give.

The problem of "easy riding" is not one of absorbing road shocks (springs attend to that), but one of controlling spring recoil.

recoil with a jerk-causing a shock of their own; devices which attempt to control that recoil by constant resistance-disregarding the fact that the recoil is not constant, but is violent following large bumps and mild following small bumps.

Watson Stabilators, exclusively, control spring recoil in exact proportion to the force of the recoil, which accounts for the wholly new luxury of motion of a Stabilated car.

Test Stabilators to your own satisfaction in any way you want. Then get your customers to know Stabilators as thoroughly as you do. Once a car owner understands the principle and feels the results of Stabilation, your sale is almost automatic. Particularly since the price is in favor of Stabilators, too.

Write for liberal distributor or dealer proposition.

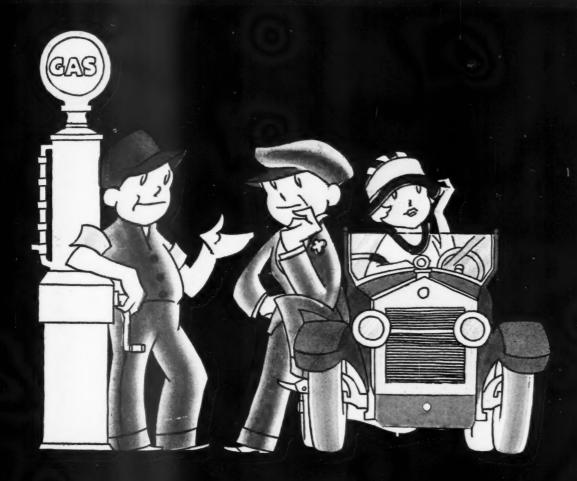
JOHN WARREN WATSON COMPANY, Philadelphia 24th and LOCUST STREETS



Stabilation in Europe

Isotta Fraschini, one of the world's most superb cars, is Stabilated in Milan, Italy, as a standard factory feature. Several other foreign makes imported to America are also Stabilated. And they fol-lowed the example of nine of America's leading cars.

Could you want higher authority?



Motorist-"I want a set of bumpers front and rear. I want to protect my paint job."

Garageman-"Good idea. And how about protecting your lives? Are your brakes safe?"

Motorist-"H-m-never thought of that. You better look 'em over!"

JOHNS-MANVILLE Automotive Equipment JUHAH HAHVILLE ASBERTO

Ask'em to reline

H





Ask'em to reline before these things happen ~

MORE than fifty per cent of all automobile accidents are due to defective brakes.

Did you ever stop to consider that you could prevent many of these accidents to your own profit—just by going after re-lining work in a business-like way?

Inspect your customers brakes frequently.

Make liberal use of Johns-Manville printed helps—window displays, booklets, dealer ads, etc. Be sure that everybody who comes into your shop knows that you reline brakes with Johns-Manville Asbestos Brake Lining.

We have tried to make this lining as well as brake lining can be made. We honestly believe that we are doing so.

Our price is fair—a low one too!

And we have backed Johns-Manville Brake Lining with a powerful group of sales helps that your Distributor can supply on request.

Ask one of the distributors listed on the next page about the Johns-Manville Plan.

He can suggest ways that you can carry on a re-lining campaign which will not only be profitable to you but also a valuable service to the community.





CHOOSE YOUR DISTRIBUTOR

Alabama Moore-Handley Hardware Co., Birmingham Johnson Tire & Auto Co., Montgomery

Arkansas Fort Smith Automotive Supply Co., Fort Smith Crow-Burlingame Co., Little Rock

Crow-Burlingame Co., Little Rock
California
Lyon Co., Fresno
Chanslor & Lyon Co., Fresno
The Santa Company, Los Angeles
Chanslor & Lyon Co., Los Angeles
Featherstone, E. A., Los Angeles
McCoy Motor Supply Co., Los Angeles
McCoy Motor Supply Co., Los Angeles
Chanslor & Lyon Co., Oskland
Kimball-Upson Co., Sacramento
P. W. Gavin Company, San Diego
Chanslor & Lyon Co., San Francisco
McCoy Motor Supply Co., San Francisc
California Auto Supply Co., Stockton

Colorado
Auto Equipment Co., Denver
Foster Auto Supply Co., Denver
Motor Accessories & Tire Co., Pueblo

Connecticut
Hessel & Hoppen Co., New Haven
Motor Tire Service Co., Putnam

District of Columbia
National Electrical Supply Co.
Rubel, Chas., & Co.

Florida Baughman Company, G. Norman, Jacksonville Baughman Company, G. Norman, Miami Baughman Company, G. Norman, Tampa

Georgia
The Frank Corporation, Savannah

Illinois
Automotive Specialty Co., Chicago
Chicago Automobile Supply House,
Chicago
Motor Car Supply Co., Chicago
Sheridan Auto Supply Co., Chicago
Tenk Hardware Co., Quincy
Washington Auto Supply Co., Washington

Indiana
Orr Iron Co., Evansville
Lomont & Co., Ft. Wayne
The I. J. Cooper Rubber Co., Indianapolis
Goodlin Auto Equip. Co., South Bend

Iowa Cedar Rapids Auto Supply Co., Cedar Rapids Rapids Sieg Co., Davenport Herring Motor Co., Des Moines Repass Auto Co., Waterloo

Ransas
The Weldon Motor Supply Co., Salina
Southwick Auto Supply Co., Topeka
The Massey Hardware Company, Wichita

Kentucky
O. W. Murphy Co., Inc., Lexington
Peaslee-Gaulbert Co., Louisville

Louisiana Borden-Alcklen Auto Supply Co., Inc., New Orleans Interstate Electric Co., Shreveport

Maine
The Farrar-Brown Company, Inc.
Portland Maryland
Auto Supply Co., Baltimore
Coggins & Owens, Baltimore

Massachusetts
Linscott Supply Co., Boston
Motor Tire Service Co., Fitchburg
Duncan & Goodell Co., Worcester
Motor Tire Service Co., Worcester

Michigan
E. A. Bowman, Inc., Detroit
Cummings Bros., Filint
Tisch Auto Supply Co., Grand Rapids

Minnesota Kelley-Duluth Co., Duluth Minneapolis fron Store Co., Minneapolis Reinhard Bros. Co., Minneapolis Nicols, Dean & Gregg, St. Paui

Missouri
Joplin Supply Co., Joplin
The Faeth Company, Kansas City

Missourt (cont'd)
Ayers Auto Supply Co., St. Joseph
Beck & Corbitt Iron Co., St. Louis
Fred Campbell Auto Supply Co., St. Louis
Geller, Ward & Hasner, St. Louis
Ozark Motor & Supply Co., Springfield

Montana Northwestern Auto Supply Co., Billings Nebraska Nebraska Buick Auto Co., Lincoln Nebraska Buick Auto Co., Omaha Storz-Western Auto Supply Co., Omaha

Nevada Nevada Auto Supply Co., Reno New Hampshire Thompson & Hoague Company, Concord

New Jersey Economy Auto Supply Co., Newark Pruden Hardware Co., Newark

Pruden Hardware Co., Newark

New York
Albany Hardware & Iron Co., Albany
Martin-Evans Co., Brooklyn
H. D. Taylor Co., Buffalo
Morrow Distributing Corp., Elmira
Weaver-Ebling Automobile Co., N.Y. C.
Pruden Hardware Co., W. E., N. Y. C.
Whittemore-Sim Co., Inc., N. Y. C.
The Olmsted Co., Inc., Syracuse

The Olmstea Co.,

North Carolina
Carolinas Auto Supply House, Charlotte
Glasgow-Stewart & Company, Charlotte
Automobile Supply Co., Wilmington

North Dakota Grant-Dadey Company, Fargo

or Canada, Ltd., Edmo
The Penn. Rubber & Supply Co., Akron
C. & D. Auto Supply Co., Cincinnati
The Penn. Rubber & Supply Co., Cincinnati
The Penn. Rubber & Supply Co., Clevand
The Penn. Rubber & Supply Co., Toledo
The Motor Car Supply Co.
Tolanda, Ltd., Edmoto
Markall-Wells, B. C., Ltd
Motorbal
Morrielf & Endress, Ltd.
Wood, Vallance, Ltd., T
New Brunswick
The Lounsbury Co., Ltd.
New Scotta
J. Snook, Ltd., Truro
Onlario
A. Chown & Co., Ltd., F
Jas. Cowan & Co., Ltd., T
Johnston-Deane, Ltd., T
Johnston-Deane, Ltd., T
Samuel Trees & Co., Ltd.
Ramwan-Anthony Co., V

Oregon Wiggins Company, Inc., Portland Chanslor & Lyon Co., Portland

Wiggins Company, Inc., Portland Chanslor & Lyon Co., Portland ennsyltania Motor Accessories Co., Allentown Central Supply Co., Altoona The Penn. Rubber & Supply Co., Erie Front Market Motor Supply Co., Harrisburg General Auto Supply Co., Harrisburg Johnstown Auto Co., Johnstown General Auto Supply Co., Lancaster The Penn. Rubber & Supply Co., Oil City Berrodin Auto Supply Co., Philadelphia Gaul, Derr & Shearer Co., Philadelphia Roberts Electric Supply Co., H. C., Philadelphia Jackson Motor Supply Co., Pittsburgh Jackson Motor Supply Co., Pittsburgh Jackson Motor Supply Co., Pittsburgh General Auto Supply Co., Vork Ethode Island

General Auto Supply Co., York
Rhode Island
Belcher & Loomis Hardware Co.,
Providence
South Carolina
Franke Co., Inc., C. D., Charleston
D. W. Alderman, Jr., Inc., Florence
D. W. Alderman, Jr., Inc., Greenville
South Dakota
L. & L. Motor Supply Co., Sloux Falls
Tennessee

ennessee
Southern Auto Supply Co., Chattanooga
The I. J. Cooper Rubber Co., Knoxville
Ozburn-Abston & Co., Memphis
Auto Supply Co., Nashville
The I. J. Cooper Rubber Co., Nashville

Eras Ferris-Dunlap Co., Dallas Sutizertand K. Bissegger Firm, Zurich K. Bissegger Firm, Zurich K. Bissegger Firm, Zurich Meyer Co., Jos. F., Houston He Equipment Co., San Antonio McCauley-Ward Motor Supply Co., Waco Ciricetti & Barrella, Montevideo McCauley-Ward Motor Supply Co., Waco Ciricetti & Barrella, Montevideo

Utah Inter-Mountain Electric Co., Salt Lake City Motor Mercantile Co., Salt Lake City

Nov

Motor Mercanthe Co., Burlington Vermont Hardware Co., Burlington Virginia
The Owens-Merritt Co., Danville Pledmont Hardware Co., Danville Crump Co., Benj. T., Richmond Meadows-Frice Co., Roanoke

Crump Co., Bell. T., Richmond Meadows-Price Co., Rolanoke Washington Chanslor & Lyon Co., Seattle Reynolds & Reynolds, Seattle Chanslor & Lyon Co., Spokane Holley-Mason Hardware Co., Spokane Chanslor & Lyon Co., Tacoma Reynolds & Reynolds, Tacoma West Virginia Williams Hardware Co., Clarkesburg Wisconsia Clemons Auto Supply Co., Eau Claire Andrae & Sons Co., Julius Milwaukee Shadbolt & Boyd Iron Co., Milwaukee Tisch Auto Supply Co., Milwaukee Western Motor Supply Co., Milwaukee Western Motor Supply Co., Milwaukee Wyoming

Wyoming Auto Equipment Co., Casper CANADA

Alberta CANADA
The Motor Car Supply Co.
of Canada, Ltd., Calgary
The Motor Car Supply Co.
of Canada, Ltd., Edmonton British Columbia Marshall-Wells, B. C., Ltd., Vancouver

Marshall-Wells, B. C., Ltd., Valled Manttoba Moncrieff & Endress, Ltd., Winnipeg Wood, Vallance, Ltd., Winnipeg New Brunswick
The Lounsbury Co., Ltd., Moncton

A. Chown & Co., Ltd., Kingston As. Chown & Co., Ltd., London As. Workman & Co., Ltd., Ottawa Hyslop Brothers, Ltd., Toronto Johnston-Deane, Ltd., Toronto Samuel Trees & Co., Ltd., Toronto Bowman-Anthony Co., Windsor

Quebec J. S. Mitchell & Co., Ltd., Sherbrooke skatchewan Wood, Vallance, Ltd., Regina

Argentine FOREIGN
Carlos Goffre & Co., Buenos Aires
Australia
Duncan & Co., Pty., Ltd., Melbourne
Cornell, Ltd., Adelaide
Canada Cycle & Motor Agency,
(Queensland, Ltd.,) Brisbane
Hislop, Lloyd & Co., Sydney

China The Koster Company, Shanghai The Roses Co., Copenhagen F. Bulow & Co., Copenhagen Great Britain and Ireland A. C. R. Greene & Co., Ltd., London Japan and Korea Takemura Company, Yokohama

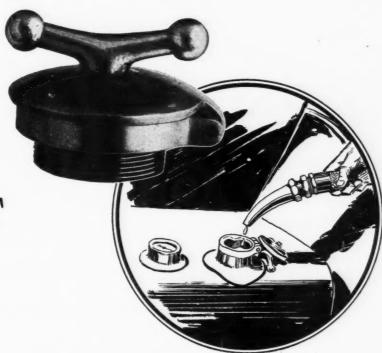
Jugo-Slavia William H. Smyth, Belgrade William H. Sand Co., Mexico City Mexico Auto Supply Co., Mexico City New Zealand Jas. J. Niven & Co., Ltd., Wellington

Norway Corneliussen & Stakgold A/S, Christiania George Jensen of Christiania, Christiania oeden A. B. Stern & Stern, Stockholm

JOHNS-MANVILLE INC., 292 MADISON AVENUE AT 41ST STREET, NEW YORK CITY Branches in 62 Large Cities. For Canada: CANADIAN JOHNS-MANVILLE CO., Ltd., Toronto



Every Gas Tank Needs This Cap the Cap that can't be lost!



NEVA-LOST

Gas—Tank—Cap

\$1.50

IT can't bounce off in the dirt, and no thief can steal it. Nothing gets into the tank but gas, and the gas stays clean.

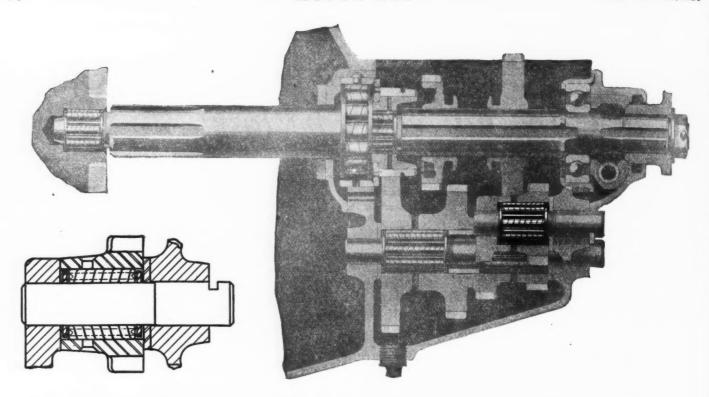
Once in place—and it takes only a minute to install—the Neva-Lost Cap becomes part of the tank.

Show it to your owners. It's something that they need.

Ask Your Jobber's Salesman

or write to

Welker-Hoops Manufacturing Company Middletown Connecticut



Higher Quality Transmissions at Low Cost No. 4 In the Reverse Idler

In quieting your transmission the reverse idler should not be overlooked. A transmission may run quietly on all forward speeds, but if reverse is noisy the whole unit will be discredited.

A Hyatt roller bearing installed in the reverse idler gear as illustrated above produces additional quietness in operation. It is easy to assemble and will run indefinitely without adjustment or attention of any kind.

There is no need to worry about replacing Hyatt reverse idler bearings for they seldom need replacing. Their installation assures permanence, freedom from attention and quiet operation.

HYATT ROLLER BEARING COMPANY

NEWARK DETROIT CHICAGO SAN FRANCISCO

MILWAUKEE

WORCESTER

CLEVELAND

PITTSBURGH

PHILADELPHIA

HYATT Roller Bearings

Rickenbacker A · CAR · WORTHY · OF · ITS · NAME

Success Comes From Associating With Successful Men

- Line up with the leaders—and you will become a leader.
- Rickenbacker is one of the outstanding successes of the industry.
- The growth of this concern has been one of the romances of trade.
- Rickenbacker was not afraid to lead.
- When others hesitated to adopt features they knew were better, just because it meant pioneering with an element of risk, Rickenbacker went ahead.
- And so today this going concern is the acknowledged leader in

- 4-Wheel Brakes, Vibrationless Motors, Air Cleaners, Oil Rectifiers and in several fundamental engineering improvements.
- It takes courage to accept leadership—but the reward is in keeping with the risk.
- Rickenbacker distributors are now the recognized leaders in this connection.
- They are selling a car that is a year, at least, in advance of any other.
- Contracting time is—now.
- Suggest you come to the factory. If you can't do that, do the next best thing—write.

Rickenbacker Motor Company

Detroit, Michigan

Famous "Six" Prices
ort Phaeton . . . \$1595
upe 2095



f. o. b. Detroit—plus war tax

Vertical "Eight" Prices

 Sport Phaeton
 \$2195

 Coupe
 2695

 Sedan
 2795

For Service Equipment refer to the catalogue with the golden rod section

MEMBERS Service Equipment Associates

Albertson & Co., Inc.
Sioux City, Iowa
T. R. Almond Mfg. Co.,
Ashburnham, Mass.
Bastian-Blessing Company
(Rego) Chicago, Ill.
The Black & Decker Mfg. Co.,
Towson, Md.
Bonney Forge & Tool Works,
Allentown, Pa.
Brunner Mfg. Co.,
Utica, New York
Burton-Rogers Company
Boston, Mass.
Continental Sales Corp.,
Columbus, Ind.
Kellogg Manufacturing Co.,
Rochester, N. Y.
The Manley Mfg. Co.,
York, Pa.
Wood-Imes Mfg. Co.,
Minneapolis, Minn.
Oxweld Acetylene Company,
New York, N. Y., & Chicago, Ill.
Stevens & Company





Tools and Machinery for Automotive Maintenance are grouped together in this catalogue. Goldenrod Section

To make it easier to locate items of automotive service equipment in general catalogues, many automotive jobbers are grouping all the Service Equipment in one section of their catalogue and printing this Service Equipment Section on paper which is goldenrod in color.

In order to keep up to date on service equipment you have only to pick up your jobber's catalogue and run through the goldenrod section.

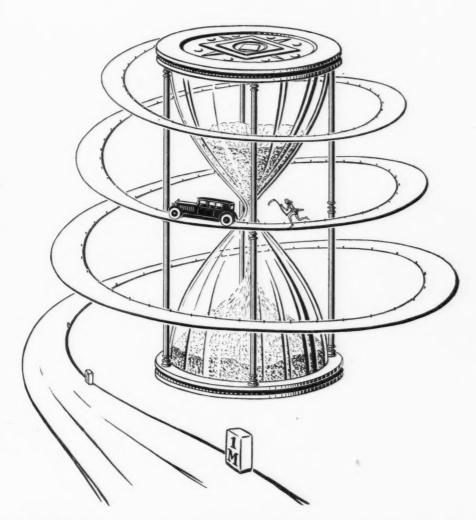
This plan is for your convenience in locating and ordering Service Equipment.

When you see a catalogue which has a thick section printed on goldenrod colored paper you can be almost certain that the particular jobber who published this catalogue is specializing on Automotive Service Equipment.

This is a result of the cooperation between the Service Equipment Associates listed opposite and the automotive jobbers throughout the country.

SERVICE EQUIPMENT ASSOCIATES TOWSON MARYLAND

Or Communicate with any member of Service Equipment Associates listed at left



Miles or Years?

Are you judging the condition of a car by its age, or the miles it has travelled? Of one thing you can be certain—since the day it took to the road its cable system has been constantly getting no better. Grease—oil—moisture—heat—vibration, and old Father Time—all have been working on it. Do not overlook the cable; rather look it over, and your winter service business will show a nice profit as a result.

Of course you will tell your customer that you are installing a new Packard cable because that knowledge creates confidence in your service.

The <u>Packard</u> Electric Company

WARREN, OHIO

THEORETICAL PROFITS

Tire inflation is a free service yet it returns with a profit from the motorist who appreciating the service retaliates by purchasing oil, gas and other necessities in exchange for this courtesy.

Plus ACTUAL MONEY PROFITS

Cleaning by air—painting by air—freshening upholstery by air—driving pneumatic tools and many other jobs graduate from the "expense" class into the "profit" class when air is used for power.

The first air compressor made for garage use was built by Brunner. As the industry grew and the demands for quicker, better service became imperative, Brunner responded by developing the air compressor to meet the situation.

This meant perfection of manufacture. This meant an air compressor that would meet every requirement of an exacting service. It meant silent, smooth-running, immediate starting, lack of vibration.

It meant design that provided for low maintenance cost and long lasting life. It meant good for twenty years at hard labor.

A Brunner is a super-safe air compressor representing an investment that pays the owner substantial day-in-and-day-out profits.

There is a Brunner for you. Built to fit your individual requirements—small or large. There's money in the air for every Brunner owner.

Brunner Manufacturing Co., Utica, N. Y.

Oldest and Largest Builders of Garage Air Compressors in the World BRANCH OFFICES: Cincinnati, O. Kansas City, Mo. San Francisco O. Kansas City, Mo. San EXPORT OFFICE: Utica, N. Y.



There's Money in the Air from a Brunner Compressor

"AIR Profits" is a booklet full of money making ideas for the progressive garage owner. Send for this booklet and get the benefit of Brunner experi-

BRUNNER MODEL 932

ASSEMBLED UNIT

Largely self operating—includes a remarkable unloader-controller which maintains de-sired tank pressure, at same time relieving motor or start-ing load.

Has Brunner doubly adjustable belt tightener, patented non-

pounding Brunner check valve, and double tested Brunner tank guaranteed for working air pressure of 175 lb. per sq. in.

Noiseless-vibrationless-good for 20 years at hard labor.



When you select your new line of tires

Get one that covers all of these desirable points:

- 1. Quality that is proved through years of use.
- 2. Reputation such as can be based only on success extending over a long period.
- 3. Price range which makes it possible to fill any demand whether for low initial cost, for extreme mileage or for luxurious comfort.
- 4. Product having a popularity which is still conspicuously growing.
- 5. Manufacturers policy founded on long experience as well as on good intent.

When a live and ambitious dealer handles a line which will give him all of these points, he can build and hold a successful tire business.

The Fisk Tire Co., Inc.

Chicopee Falls, Mass.

You make sure when you select





Tungar Standard Equipment

48E-17

For the car dealer's convenience

4-Battery Tungar, for charging one
to four 6-volt batteries at 5 amperes

The battery service station's favorite
The Big Tungar, for one to ten 6-volt
batteries at 6 amperes or less.

Used by large service stations

The Double Tungar, for one to ten
6-volt batteries at 12 amperes or less;
or for one to twenty 6-volt batteries at 6 amperes or less.

The Guide to Excellence

There is only one Tungar. It bears the G-E monogram, the guarantee of excellence on goods electrical.

The G-E monogram on Tungar stands for extensive research work of G-E scientists to insure a product so scientifically correct, dependable and efficient that garage and service stations might be absolutely carefree in its use.

When buying new battery-charging equipment consider that in Tungar you have the benefit of one of the outstanding achievements of G-E Research Laboratories.

The Tungar is very efficient, costing less to operate than many similar devices designed for the same service. It requires no attention for overnight charging.

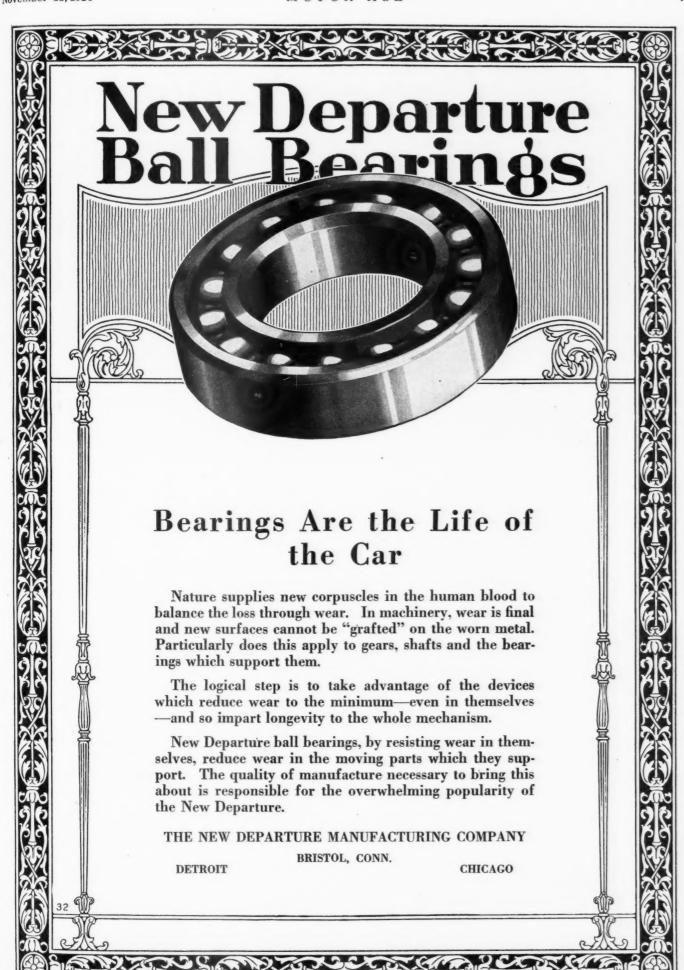


Tungar—a registered trade mark—is found only on the genuine. Look for it on the nameplate

MERCHANDISE DEPARTMENT

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY : MERCHANDISE DEPARTMENT : BRIDGEPORT, CONN.





Accepted

by the

Automotive Industry

Most everyone knows that the holes in the Automotive Industry have been made by "Van Dorn" Electric Drills for more than 20 years. America's finest family of holemakers is practically standard equip-

makers is practically standard equipment in plants of the best motor car and truck makers, the largest body builders and the most successful accessory and parts manufacturers.

For Garages and Service Stations

"Van Dorn's" policy is to give garages and service stations the same high quality tools that these manufacturers use for their production work:—built of the same materials, in the same shop, by the same skilled mechanics, yet reasonable in price.

For example, "Haffinch, the Drill of a thousand uses" shown above, costs only \$60.00:—the first time in the history of electric tools that garages and repair shops can purchase a half inch portable electric drill of "Van Dorn" quality at a price so reasonable.

Automotive Jobbers

You can cash in on "Van Dorn" Prestige, Performance and Publicity. "Van Dorn" electric tools lead you to a practically unlimited market. A representative will be pleased to discuss our agency proposition with you.

The Van Dorn Electric Tool Co.

Makers of Portable Electric Drilling, Reaming and Grinding Machines, etc. Cleveland, Ohio

Factory Representatives

*Boston *New York City Buffalo Philadelphia Chattanooga Pittsburgh *Chicago *Cincinnati *St. Louis

Montreal

*Cincinnati *St. Louis St. Paul *Sen Francisco *Seattle *Toronto *Service *

U

Jan ELECTRIC

CHEVROLET Hupmobile INTERNATIONAL TRUCKS

JORDAN

CADILLAC PACKARD

> FISHER BODIES STANDARD OIL Willia Ourland





Famous Users

These well known business organizations, the most critical buyers in the world, are a few of the many large users of "Van Dorn" Electric Drills for production and plant maintenance. "Van Dorn" tools are also the minute men of the shop for maintenance and repair jobs in garages and service stations.



Oldsmobile has been a name respected since the birth of the automobile industry. Oldsmobile is Harrison cooled.

HARRISON RADIATORS

HARRISON RADIATOR CORPORATION, LOCKPORT, NEW YORK



THE MARK OF RADIATOR SATISFACTION



Only Gemco EXPERIENCE Could Build the 1925 Gemco Line!

Gemco has been making automobile bumpers from the beginning of the industry. And year by year, Gemco has been building better bumpers, forging ahead by experience, developing new Gemco processes by studying every phase of bumper manufacture and producing Gemco bumpers completely in the Gemco plant.

The results of this experience? First, greater strength in proportion to weight. This is made possible by the improved Gemco design, the exclusive Gemco process of tempering steel, and the strong, yet flexible reinforcement of the tough steel bars. Thus, needless weight that causes vibration and loosens the brackets is eliminated.

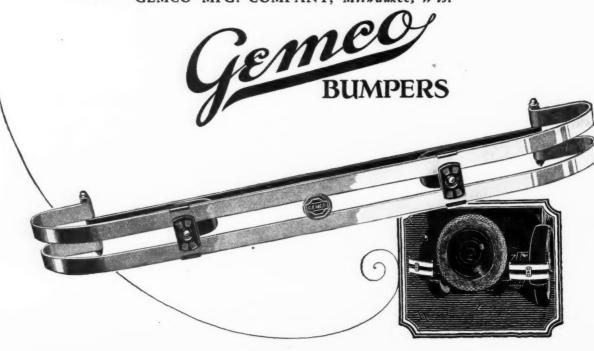
And Gemco brackets are an unequalled achievement in bracket building. They fit bumpers of all makes, attach quickly and hold securely. This interchangeable feature solves one of the dealer's biggest problems in handling bumpers. Another result of Gemco experience is the rust-defying Gemco finish, produced by our own secret process of nickel plating on a copper base. The coating of nickel is heavier and better quality. Stays on! Provides a beautiful lasting finish.

Sell Gemco bumpers and reap the benefits of this experience. The 1925 line is a winner.

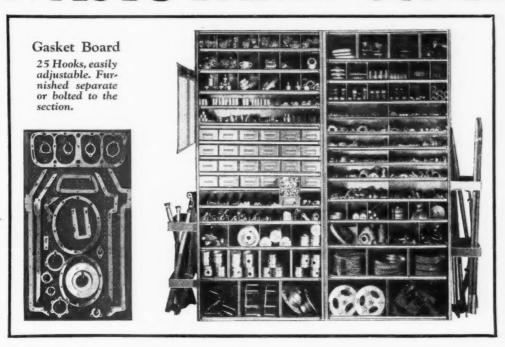
GEMCO MFG. COMPANY, Milwaukee, Wis.







LYON AUTO PARTS CONTROL



From the Dealer's Standpoint

CAR models change—agencies are changed, businesses expand. Dealers far from sources of supply need more of certain parts than dealers close by.

These conditions demand an extent of flexibility in parts storage equipment not found in "ready made" systems.

Lyon Auto Parts Control gives systematic control of auto parts, simply and easily. Yet it does not tie the dealer down in any way. As few or as many parts as wanted are provided for. It does not become obsolete as conditions change.

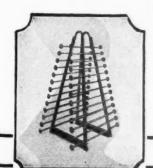
The parts index board, attached at the

left of the view above, enables anyone to locate immediately any wanted part by name or parts number and know the selling price. That's how easy it is to work.

The sections illustrated here, with end irons for long parts, and gasket board, accommodates \$1,000 worth of Dodge parts. Systems are available for from \$500 to \$30,000 stocks—for any make of car.

Write us, giving the make or makes of cars you service, with extent of your stock, and we will send you special bulletins describing the Lyon Auto Parts Control System that meets your needs.

Lyon Metallic Manufacturing Company Aurora - Illinois



Lyon Auto Parts Control Systems are sold by leading Automotive Jobbers



for every storage need





It appears that Dame Rumor has been very busy announcing various plans for the future of The Gardner Motor Company. Too bad, "she" has not had the facts!

Briefly and correctly stated, this Company has big and very definite plans for the future, which will unquestionably continue to insure its permanence and prominence, and that of its distributing organization.

We will announce a new program in detail in this and other publications on December 18th. Watch for it.

THE GARDNER MOTOR CO., INC. ST. LOUIS, U. S. A.

Permanent roads are a good investment —not an expense

Why America **Must Have More Paved Highways**

Almost every section of the United States is confronted by a traffic problem.

Month by month this problem is becoming more and more serious.

Hundreds of cars pass a given point every hour on many of our state and county roads. Downtown city streets are jammed with traffic.

Think, too, how narrow many of our roads are, and how comparatively few paved highways there are in proportion to the steadily increasing number of cars.

If the motor vehicle is to continue giving the economic service of which it is capable, we must have more Concrete highways and widen those near large centers of population.

Every citizen should discuss highway needs of his community with his local authorities.

Your highway officials will do their part if given your support.

Why postpone meeting this pressing need? An early start means early relief.

PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

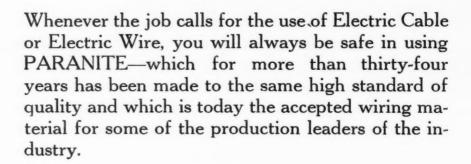
Atlanta Birmingham Boston Des Moi Charlotte, N.C. Detroit

Dallas Jacksonville Chenver Kansas City Des Moines Los Angeles Detroit Memphis Milwaukee Minneapolis New York Indianapolis Milwaukee Minneapolis Parkersburg San Francisco Seattle Philadelphia Pittsburgh St. Louis St. Louis Portland, Oreg. Salt Lake City Washington, D.C.

IF IT'S

PARANITE

IT'S RIGHT







Paranite Products

PARANITE Wire and Cable is sold through the Jobber. You will find that, if you ask them for it, your supply house will ship you any of the following PARANITE PROD-UCTS:

Charging and Storage Battery Cable—Horn and Lamp Cord—Lighting Cable—Limousine Cord—Low Tension Cable—High Tension Cable—Spotlight Cord—Starting Cable.

Correctly Priced

From the beginning, the entire industry recognized the dependable uniformity as well as the value of PARANITE rubber insulated wire and cable.

This approval has been reflected always in a large volume of business which has enabled us to establish a level of very moderate prices.

Leading Jobbers everywhere carry complete stocks.
Your Jobber can deliver it to you.

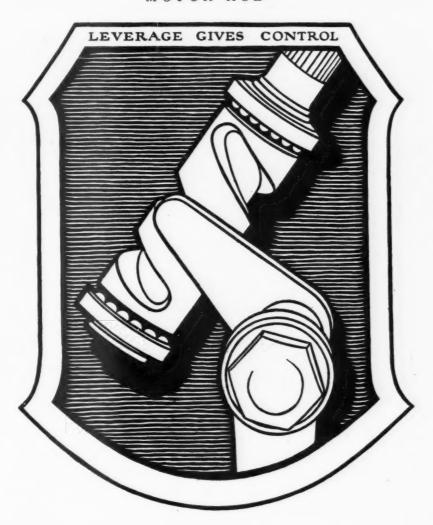
Indiana Rubber & Insulated Wire Co.
Jonesboro, Indiana

A. J. Musselman
S49 W. Washington St.
Chicago, Ill.

West Hartford, Conn.

Physical Research Conn.

A. J. Musselman
S49 W. Washington St.
Chicago, Ill.



Riding Them Soft

MOST cars are driven with tires under-inflated. Part of the time at least. Under-inflation means easier riding—and much harder steering. Here again, the Ross Cam and Lever Steering Gear solves a problem that every manufacturer faces.

Write for the facts

ROSS GEAR AND TOOL COMPANY, 400 Heath Street, Lafayette, Indiana





Adding and Figuring Machine Service

is now offered to automotive dealers at an amazingly low price

The new attractively priced Sundstrand Special-Junior Model gives you regular adding and listing service plus direct subtraction and automatic-shift multiplication. Never was so much adding and figuring machine service offered for so little money.

Check over the following features and you will realize how perfectly this machine will fit your business—adding—listing—direct subtraction—automatic-shift multiplication—speedy 10-key keyboard—automatic column selection—portability—convenient desk size—one-hand control—automatic subtotals—visible writing—forced printing of totals. All this at a lower price than was ever before thought possible!

Compare this machine for performance, versatility, ease of operation, range of usefulness, speed and price. Let us demonstrate in your place of business, on your work. Send the coupon or address Dept. M11 for an illustrated folder that tells all the advantages of this remarkable machine.

SUNDSTRAND ADDING MACHINE COMPANY Rockford, Ill.

Sales and service stations everywhere in the United States and foreign countries

Sundstrand

SPECIAL-JUNIOR
ADDING AND FIGURING MACHINE

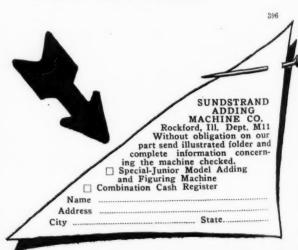
If you have an accessory or retail supply department you need the

Sundstrand

COMBINATION CASH REGISTER

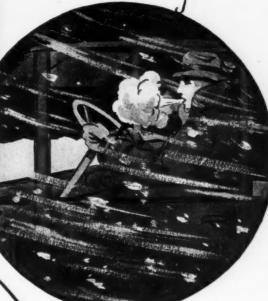
Cash register and adding machine combined—at ONE low cost. Credit file furnished at slight additional cost. This machine saves hours of time, guards against errors, protects profits. Classifies sales by clerks and departments. Makes a non-erasable record. FORCES CORRECT INDICATION and recording of cash, credit, paid-out, etc. You can read cash totals at any time. Tape rewinds and locks in machine.

Famous 10-key Sundstrand Adding Machine—adds, multiplies, divides, etc. Prevents errors in checking sales slips and inventory sheets, footing ledger, bank balance, etc. Range—1c to \$99,999.99.





hes Warm and Comfortable ~Hes Frozen Stiff



Winter Driving Without Freezing

For Ford, Chevrolet, Overland 4, Star, Gray. Keeps out cold air and wind.

Small Cost—Great Comfort— Large Sales—BIG PROFITS

The low retail cost of Rie Nie Pedal Pants makes it an absolute certainty that your customers will buy it. It is a necessity—for all who drive during the cold wintry days. The cold air whistling up through the openings in the floor of the car literally "freezes the feet" of the driver. Rie Nie Pedal Pants keeps this cold air from coming through the openings around the pedals and brake; and therefore keeps the driver warm and comfortable. Every motorist needs this necessity. Better, YOUR customers need it—and want it. This fact spells Big Sales and BIG PROFITS to you.

NOW! STOCK IT! NOW!

Stock this necessity NOW. Get it before winter comes. Show it to your customers. Keep it displayed in your windows. You will be agreeably surprised with the large sales you make long before cold weather arrives.

Fords

SELLS ON SIGHT!

Other Cars \$1.50

Everyone wants to keep warm—while driving.

It does. It meets a genuine need of every motorist who drives in winter. Ask any automobile mechanic—and he will tell you that drivers stuff paper, felt, rags and other substances in the openings around the pedals and brake to keep the cold air out. Rie Nie Pedal Pants are a genuine necessity—and SELL ON SIGHT.

Quality Products that are needed.



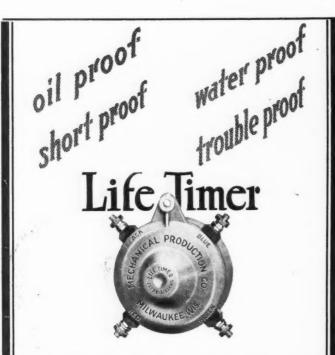
If your jobber can't supply you, order from us-and send us your jobber's name A FAST SELLER IN A DULL SEASON—RIE NIE PEDAL PANTS

Sleeves Fit Snug Around Pedals and Levers-Rubber Permits Easy Oper-

Fits Snug and Tight to Floor of Car -Beneath Regular Floor Mat. Keeps Your Feet "Warm as Toast."

Automotive Products

All in One Dressing-**Aluminum Enamel Battery Paint Bearing Blue** Clutch and Brake Compound Enamel (Air Drying) Enamel (Cylinder) Fan Belts Friction Tape Gasket Cement Graphite Leather Dressing Metal Polish and Nickel Polish Patch Pedal Pants Polish (Auto Body) **Radiator Cement** Orange Shellac Radiator Hose Rim Paint Rubber Cement Shellac (Gasket) **Rubber Filler and Cement** Spring Lubricant Tire Mica and Tire Talc Tire Paint Valve Grinding Compound Varnish (Clear Auto)



Life Timer Makes New Records

In Mileage

Here's a Timer for thrifty buyers—with double mileage to give them as the big buy.

Reversible commutator made of 5/16 in. bakelite with brass plugs firmly anchored in, is one of the big exclusive features with Life Timer.

The whole job is built like a high priced distributor and requires no attention.

In Sales

Life Timer has been setting new sales records for representative dealers and jobbers this season. Once the Life Timer counter container is set up it goes to work for the dealer making sales. The fact that it is really trouble proof and cannot warp or distort in any way paves the way for the clincher argument —"it's unconditionally guaranteed."

with the sible ator



Mechanical Production Co. Milwaukee, Wis.



For Quick Turnover

Dealers who handle Columbia Eveready Dry Batteries enjoy quick turnover. The small amount of capital they put into battery stock is quickly back in the cash register with its profit, then out again, and so on, many times each year.

Small investment, rapid turnover, adequate profit on each individual sale—these make Columbia Eveready Dry Batteries mighty desirable for you to handle. Order from your jobber.

Manufactured and guaranteed by

NATIONAL CARBON COMPANY, INC.

New York

San Francisco

National Carbon Company, Limited, Toronto, Ontario

Columbia
EVEREADY

Dry Batteries
-they last longer

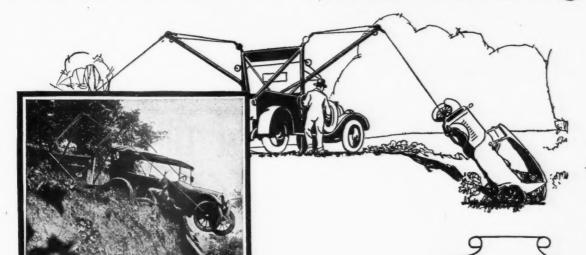
for—Gas engine ignition
Tractor ignition
Starting Fords
Firing blasts
Heat regulators

Doorbells
Buzzers
Ringing burglar
alarms
Protecting bank
vaults

Calling Pullman porters Motor boat ignition Telephone and telegraph

Electric clocks
Lighting tents and
outbuildings
Running toys
Radio "A"

Increase Your Repair Business with a - HOLMES WRECKER



Swinging Booms.

The swinging boom principle is found exclusively on Holmes Wreckers. One of the big advantages of swinging booms is the extreme working height which they permit. This extreme working height makes possible the lifting rather than the dragging of a wrecked car. (See photo above.) It makes possible the handling of wrecks which have to be carried high to clear culverts or other obstacles. It makes possible the righting of a wrecked car without additional injury to the car.

This last feature is highly important. It means that you can absolutely guarantee to handle any wrecked car and bring it in without further damaging it—if you operate a Holmes Wrecker.

In addition to affording extreme working height the swinging booms increase considerably the scope of work which Holmes Wreckers can perform and make possible the easy handling of many jobs which would be impossible with other equipment.

There are three Holmes Wreckers selling at three prices. One of them will just fit your needs. Write to your jobber or to us for catalog or better yet—see these wreckers on your jobber's floor.

ERNEST HOLMES COMPANY

CHATTANOOGA

TENNESSEE

15 EXCLUSIVE HOLMES FEATURES

- 1. 100 Foot Operating Range
- 2. Don't Block
 Traffic.
- 3. Transfers Load to the Road.
- 4. Easily Operated from the Ground.
- 5. "V" Tow Bars.

6. Swinging Booms

- 7. Double Booms.
- 8. Electric Lights for Night Work.
- 9. Two Speeds.
- 10. Full Floating Low Speed Power Shaft.
- 11. Independent
 Boom Control.
- 12. Perfect Balance.
- 13. Hand or Power Driven.
- 14. Steel Body.
- 15. Cable Guards and Guides.

For All Your Heat-Treating, Soldering, Melting, Bending Jobs



BENCH FURNACE

For every kind of metal heating and treating job. Saves sending out welding, bending and case-harden-ing jobs. Produces 1800 degrees without a forced air blast or blower.

Send for Free Booklet.



New York Office: 277 Lafayette St.



Illustration shows a broken away end view of case. Note drawer storage for stock of items on display in front and top section of case.

THE SHERER ACCESSORY DISPLAY CASE

is making increased sales of profitable accessories for the thousands of retailers who are using it.

Built in four lengths and with either drawer or shelf storage as optional equipment there is a size for every salesroom.

Our liberal payment plan makes it easy to own and after it is installed the extra profits more than take care of the monthly payments.

For complete information write us today on your business letterhead.

SHERER-GILLETT COMPANY 1701-1709 So. Clark St., Chicago, Ill.

MONEY MAKING MACHINES

STORMIZING machines are truly money makers. They enable you money makers. They enable you to make biggest profits on every overhaul job. They handle all your cylinder renewing, accurately and efficiently, enabling you to turn out the high quality work that wins your customers' lasting approval. The automatic time and labor saving features make high profits posing features make big profits possible by lowering operation costs.

Write for the Storm Book, "Modern Cylinder Methods"



406 A Sixth Ave. So.

Minneapolis

Get This "Pioneer" Garage Special

and Valve Grinder

Greatest time and money saver, as well as money maker, for

"It Will Do The Work"

Louisville Electric Mfg. Co.
Louisville, Ky., U. S. A. Incorporated Louisville, Ky., U. S. A. C. E. Willey, Pres. J. B. McFerran, Secy.-Treas.

KOCH KREEPER No. 3

Supports the head in three different —ball bearing swivel. Price East of positions while working under the car. Rockies, \$3.00—West of Rockies \$3.50. Eliminates body fatigue and neck Cash with order; shipping charges cramps. Padded head rest can be adjusted to any position by slight pressure while worker is on creeper. Sturdy and durable. Will last in-fly your Jobber does not handle Koch definitely. Heavy wide wheel casters Kreepers write direct.

FT. RECOVERY STIRRUP CO.





If your BETTER bumber has no nameplate, we will furnish you one - free.

The orange and black nameplate means that the motorist has the satisfaction of knowing that there is no finer bumper made. The nameplate guarantees satisfaction and - real protection.

NEW ERA SPRING & SPECIALTY CO., GRAND RAPIDS, MICH.



Every battery terminal should be thoroly cleaned and NON-KOROD applied. Prevents corrosion and sulphation. Increases battery life. Insures full service. Great saving. Will not become brittle. Always efficient. Jobbers and Dealers can supply the trade.

Write for literature and prices, mentioning jobber's name.

National Cable Compound Co., Inc., Mitchell, Ind.

CORROSION SULPHATION SHORTING



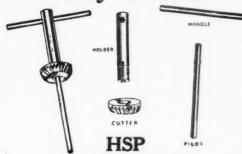
The Bearings Company of America, Lancaster, Penna.

Manufacturers of—Angular Contact Radial Bearings, Angular Contact Thrust Bearings, Thrust Ball Bearings. All Bearings made to your requirements and Blue Print dimensions. Your present Bearing sizes duplicated.

Western Sales Office 1012 Ford Bldg., Detroit, Mich.

HSP VALVE RESEATERS

—they're better



REAMER ASSEMBLY

TRUE and SQUARE VALVE SEATS

A special steel is used in the HSP Reamers. This steel takes and holds an extra keen edge. The cutters are made on a slight spiral. These are the features which make a true clean job. The keen cutters of the reamers permit fast cutting without chatter. A true, square seat is the foundation of a perfect seated valve. Made in angles of 15°, 30°, 45°, up to 75°.

HEAVY OAK CONTAINERS

HSP Reamers come in sets complete for every requirement. Each set is packed in a permanent, extra heavy, solid Oak Cabinet. Our booklet will give you complete information on these valve reseating tools.

WRITE FOR IT TODAY

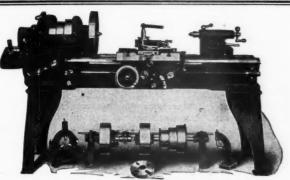
HSP

Jobbers Wanted HELLYER STEEL PARTS CO.

Jobbers Wanted

1511-13 West Pico

Los Angeles, Calif.



Now Is the Time

to select that Carroll-Jamieson Garage Lathe, built especially for service station use. The product of lathe specialists for more than 20 years. Nothing cheap, nothing freakish. Everything works. Guaranteed accurate within .001 in. to 12 inches.

Three Models, 12 in, 14 in. and 16 in., 5 ft. to 12 ft. lengths of bed. Quick-change, gears, automatic cross-feed and longitudinal feed. And think of it—prices begin at \$330.00. Don't struggle along without a lathe, when you can buy one for so little.

Get our descriptive matter and discount sheets before placing order elsewhere

Carroll-Jamieson Machine Tool Co.

Batavia,



Ohio



Weston's Model 280 Testing Set for garages

Give Customers Good Testing Service—

It's a good garage where Weston test service is available. Cars are tested with the least amount of trouble. There is no guesswork. And the testing is quick and business like. Prices are reasonable. And customers come back for service and supplies.

You can likewise build up a good testing business with this Weston Model 280 Testing Set. It accurately detects

Short Circuits Grounds Brush Troubles Starting Current Polarity Leakage Current
Defective Commutators
Open Circuits
Run Down Batteries
Defective Lamp Sockets

Not only the quickest, most accurate and efficient outfit—but the most compact, complete and versatile. A miniature precision volt-ammeter having six ranges, 30 and 3 volts—100 milli-volts—and 300, 30 and 3 amperes.

Bulletin H describes this set. Write for it today.

Weston Complete Test Equipment

No. 441 "Fault Finder" for utility use and general testing. No. 443 Battery Voltmeter for testing individual cells of

battery.

No. 453 Battery Tester for heavy discharge battery testing. With Weston instruments the results of your tests cannot be successfully disputed.

Complete information on request.

Weston Electrical Instrument Co.
10 Weston Ave. Newark, N. J.

WESTON

Electrical Indicating Instrument Authorities Since 1888

STANDARD-The World Over



WILLIAMS PISTONOY RINGS

Will not Cut, Score, Injure or Taper the Cylinder because made of bearing alloys and manufactured to maintain tension and compression.

Williams Alloy Products Co. 1510 Otis Bldg., Chicago



annually installed as factory equipment

THE MANHATTAN BUBBER MFG.CO. PASSAICN.J

The Complete Line of Office Equipment THE GENERAL FIREPROOFING CO., Youngs

WINDOW SHADES FOR CLOSED CARS

Add to the appearance and comfort of the car you sell by installing "Better Shades Built by Rica." They will be a selling asset that will liven up your business

ness, We make shades of fine quality silk in colors that harmonize with the upholstery. Simply give us the name, model, year and car and exact glass measurements, We will furnish a set of one rear

and two side shades complete with all-metal roller and fittings for \$15.00 with a liberal discount to dealers.

At the same price you can have a choice of washable fabric that can be cleaned with soap and water. Write today for details and samples.

er. Write Lucia, samples. CHAS. W. RICE & CO. 319 East Third St., Uhricheville, Ohio

REPAIRMEN

Here's a new source of profit!

Source of profit:
Send us your rewind jobs,
are "Armature Winding Specialists."
Profit for you in our service. Ford generator armature rewound—\$1.95. Other
prices in proportion. All work guaranteed. Write for catalog and prices on
all generators.

H. M. FREDERICKS CO., Lock Haven, Pa., U. S. A.

Fly-Wheel GearBands

Huetter Machine & Tool Co.
Indianapolis, Ind. 546 Kentucky Ave.



Lowest Priced Method of Efficient **Spring Lubrication**

R & C Oller comes in 30 ft. rolls. One roll will equip from 6-12 cars. Installed with pilers in few minutes. Real dealer opportunity. Good profits. Write. Exclusive distributors wanted.

R. & C. MFG. CO. Parkersburg, W. Va



The Allen Manufacturing Company, Hartford, Conn.



Controls the springs both ways—
up or down. The greater the
shock the greater the hydraulic
force—a smooth, even force that
absorbs all shocks. The 2-Way
gives great and lasting satisfaction. Owners are Boosters. Our
franchise will make you money.
Write for particulars.

AUTO SPRING CONTROL CO.
Jamestown, N. Y.



THE END-PLAY OUTVITHOUT PULLING THE MOTOR

THE C. A. ADJUSTABLE CENTER BEARING CAP corrects Ford crankshaft end play and sets magneto for highest efficiency without removing the motor. Easily and quickly installed. Guaranteed for one year. List price \$3.75. Ask your jobber or dealer or write us direct.

ADJUSTABLE BEARING CO., Inc. Dept. M. Brazil, India



For **FORD** Cars

matic, safe and positive protection against theft. Approved nderwriters' Laboratories. Earns lowest theft insurance rate.

Mitchell Specialty Co., Philadelphia, Pa.



\$700 Profit in One Month

That's what one distributor made. He's only one of many doing a big business. Dealers, too, are making sales by the dozens. Few accessories in recent years have been as popular as the DUPLEX

Second Spare Tire Carrier & Rim Tool
Carries spare tire—also expands and contracts rim when changing tires. Two tools for the price of one.

Write for details.

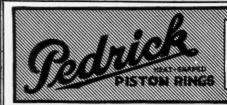
TRIPP-SECORD & CO.
606 Kerr Bldg., — Detroit, Mich.



\mathbf{PUMP}

Is carried by more dealers than any other tire pump. The patent valve makes pumping easy.

FRANK ROSE MFG. CO., HASTINGS, NEBR.



Heat shaped to in-sure perfect round-ness, sold at almost the price of a snap

Wilkening Mfg. Company 15th and Mt. Ver-non St., Philadel-phia, Pa.



THE BEST TOOL IN THE SHOP!

Every garage needs one



Handy for the small jobs

Every purchaser of TORIT ACETYLENE TORCH No. 13 says it beats anything they ever saw. We guarantee it.

USES NOTHING BUT ACETYLENE. Simply connect to Presto tank, light gas, and the outfit is put to work.

Complete as above, with connection for Presto auto tank, and full instructions.

\$7.50 in U. S. A.

\$10.00 in Canada

Order from your Jobber's salesman, or ST. PAUL WELDING & MFG. CO., 169 W. Third St., St. Paul, Minn.

There Simply Isn't Any Better Flux Made Than Rubyfluid!



A complete substitute for dangerous acids, Zinc Chloride, Salammoniac and other mixtures commonly used as a Flux. Ruby Fluid is quick acting, anti-rusting and is always ready for instant use. Ruby users include the foremost industries of the country.

Send for generous Free Sample

Rubyfluid

COMBINATION SOLDERING AND TINNING FLUX

THE RUBY CHEMICAL CO.

68-70 McDowell St.

Columbus, O.

Replace Ford Transmission With

MORE POWER FOR FORD CARS and TRUCKS

26 to 1 in low in our new type "CT"



Have three speeds forward and one reverse, replacing the regular Ford transmission—drums, bands and all. The low speed is lower than the Ford, therefore, more power—the third is the same as the Ford and the second is half way between.

SIMPLEX 3 SPEED Sliding Gear Type

It's ruggedly built with oversize alloy steel gears. Multiple disc clutch. Foot brake on jackshaft outside of case. Hyatt Roller and Genelite bearings. No cutting or machining—installation easy.

E. D. & A. F. Cronk, Inc., 140 Hotel St., Utica, N. Y.

Apex Vernier Dial



Geared condensers requiring many holes in the panel and a careful lineup of pinion shafts are a waste of time and a bother. This marvelous instrument provides the fine adjustment for tuning in distant stations. The ratio is 10 to 1. It can be quickly applied to any shaft.

applied to any shaft.

This Apex Vernier Dial is a product of the long and favorably known Apex Electric Manufacturing Company, who are producing it under the same exacting principles which have marked the great success of their Automotive products. Every accessory dealer should have a radio department. And no radio department is complete without the Apex Vernier Dial and other Apex Radio Products.

Automotive equipment dealers abould write at once for complete information relative to this money-making item.

APEX ELECTRIC MFG. CO.,

1410 W. 59th St.,

Dept. 918

Chicago

Jack-For Balloon Tires



Weight 8 pounds Capacity 1 ton Price \$4.75 The Springfield Jack No. 9 especially designed for balloon tires—

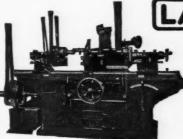
Double Screw—Ball Bearing Low Placement—High Lift. Height when closed, 7 inches. Extends to 17 inches.

Convenient handle excellent workmanship and quality.

Dealers—Jobbers—Write us for discounts

THE SHAWVER CO. Springfield, Ohio

LANDIS

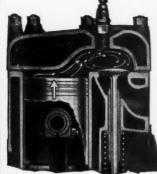


The LANDIS 4-A Special GARAGE Grinding Machine is built ESPECIALLY for repair shop work. You don't need a manufacturing machine—don't get one. The 4-A Special is perfect for repair shops, Quick and easy change from job to job. Simple to operate. ACCURATE. Built by world's largest makers of grinding machines. More value for your money, Catalog.

Landis Tool Co., Waynesboro, Pa.

New York Office-30 Church St.

The Ricardo Head



A New Era Is Here

There is now no excuse for a modern gasoline engine to knock when using ordinary gasoline. It is the Ricardo Head that makes this possible.

WAUKESHA

Motor Company
ENGINE BUILDERS
Waukesha, Wisconsin
New York, N. Y.

Get a Manley



Portable Floor Crane

The Manley Portable Floor Crane possesses all the essentials of a crane for the best and most economical automobile repair work. It has high lift, deep overhang, ample lifting capacity and great strength. And, at the same time, due to revolutionary design, the Manley Crane has the greatest lightness in weight.

Write for the complete catalog of Manley Equipment.

THE MANLEY
MANUFACTURING CO.
YORK, PA.



BUTLER SPRINGS AND THE ACE OF CLUBS ALWAYS WIN

Butler Springs are made of very fine grade steel. They are carefully heat treated and tested for hardness and strength.

Order your Ace of Springs today.

BUTLER AUTOMOTIVE SERVICE CO.
1 D. ST. EASTON, PA.

Every Willys-Overland

policy is focused on the best interests of the dealer. Willys-Overland Franchise details are yours for the asking.

WILLYS-OVERLAND, INC., TOLEDO, OHIO Willys-Overland Sales Co. Ltd., Toronto, Canada



The New Design helps it to Sell

The improved design of the Chaneeze Anti-Skid Chain Tightener, besides tightening chain, preventing slap and rattle—helps the chain to creep, thereby saving wear on tires to a noticeable extent and providing a strong sales feature. Retail price \$1.00 pair. Individually boxed, liberally discounted. Jobbers—Dealers—Write.

ELECTRIC PARTS CORP.

THE WEL-EVER PISTON RING CO., TOLEDO, OHIO Sold most everywhere. If your dealer cannot supply you write us.



Noiseless Timing Gears

Install quietness — Cloyes NOISELESS Timing Gears. They give the motor a soft, even "purr"—permanently.

Cloyes Gear Works 1614 Collamer Ave., Cleveland, O.

Sales Representatives
United Autoware Co., Fisk Bidg., New York City
N. Lowenthal, Box 952, Ft. Worth, Texas

>"CONNEAUT" ✓ Plastic Metallic Packing

Patented -Stops the leaks in automobile water pumps. Mold it with your fingers. Makes a smooth metal bearing—adjustable and practically frictionless. At your Jobbers—Get it today. It does the trick. Put up in 1 lb. cans. If your Jobber doesn't carry it, write us direct. Price \$1.65 per pound, f. o. b. Conneaut, Ohio.

The Conneaut Packing Company

Conneaut, Ohio



QUALITY—PROFIT—TURNOVER

American hammered Piston Rings

American Hammered Piston Ring Company Baltimore, Maryland



We Make

RADIATOR CORE EQUIPMENT

For the Complete Manufacture of

RADIATOR CORES

Ask Us About This Equipment

RADIATOR ENGINEERING CO.
Toledo, Ohio

ONE DAY CHARGING - THIS YEARS BIGGEST MONEY MAKER



Only \$35 cash brings you complete HB 8 hour battery charging outfit. Easy monthly terms; let your profits pay balance with nice surplus besides. 30 days' free trial on money-back guarantee. Start now to make big profits. More HB's in use than any other make. Write today for information. Hebart Bros. Ce., Box AR II, Troy, thio.

ONLY 35 COMPLETELY YOUR SHOP FOR HE BATTERY CHARGING



GENERAL AUTOMOTIVE CORP., 600 W. Jackson Blvd., CHICAGO



DILL **INSTANT-ONS**

Dust and Valve Cap Off or On in 5 Seconds

The Dill Manufacturing Co.

Cleveland, O.

Isolators Lock Plates. An Exclusive Vesta

Feature

THE ONLY ONE

A selling feature—and a very essential feature, too, are VESTA BATTERY ISOLATORS—a mark of merit in Vesta Batteries for the past 8 years. Write for the "Book of Facts" and details.

Vesta Battery Corporation Chicago, Ill.

Jacobs ROAD-LITE

Lights the way to safety

Lights up the right hand side of road 60 to 70 feet ahead. Can't shine in other fellow's eyes. Invaluable for night driving.

Jacobs Auto Safety Lamp Co., Blacksburg, Va.



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PERFECT PERFORMANCE

The remarkable showing of the three Fronty-Fords in the 500 mile race was due solely to the Frontenac Cylinder Head. This head is adapted for use on YOUR Ford by its designer and builder, Arthur Chevrolet. Book, "How to Build a Fronty-Ford," \$2; free with orders of \$50 or more. Write for FREE catalog.

CHEVROLET BROS. MFG. CO.
410 W. 10th St. INDIANAPOLIS, I

Send U. S. Your Armature Repair Work

ARMATURES REWOUND



MOST ANY TWO UNIT GENERATOR ARMATURE \$5.00

ALL WORK GUARANTEED-WRITE FOR PRICE LIST U. S. AUTO SUPPLY CO., 3845-49 S. WABASH AVE., CHICAGO

ALMOND

"STRAIGHT LINE" DRILL CHUCKS

When buying Portable Electric Drills be sure to look for the distinctive ALMOND CHUCK, which may be easily identified by the "STRAIGHT LINE" milling on the chuck body.

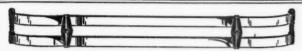
Write for complete information regarding the new ALMOND "STRAIGHT LINE" CHUCKS.

T. R. Almond Mfg. Co., Ashburnham, Mass., U. S. A.

Fan Belts and Radiator Hose

Made By

The World's Largest Makers of Fan Belts



Spring-steel, Oil-tempered Bumpers in Six Complete Styles. Guaranteed Satisfactory Attaching Arms for all Leading Makes of Cars. We invite comparison in appearance, quality and price.

THE BELLEVUE MANUFACTURING CO., Bellevue, Ohio

fit behind piston rings and keep them in perfect contact with the cylinder walls at any motor speed or

RAMSEY ACCESSORIES MFG. CORP., ST. LOUIS, MO.

Battery Pla CONTINENTAL BATTERY CO., 3201 Papin St., St. Louis, Mo.

THE QUINCY SILENT AIR-MASTER

The Most Air Per Dollar Cost

WALL PUMP & COMPRESSOR CO.

Quincy, Ill., U. S. A.



NO-LEAK-O PISTON RINGS Won't Leak Because They're Sealed With Oll.
No-Leak-O Piston Rings are making money for
dealers everywhere. Their "oilSEALing" groovefound only in No-Leak-O-packs an oil film in
between piston and cylinder walls like "packing"
in a pump. Oil and gas stay where they belong.
National advertising is helping the dealer sell
No-Leak-O. It will pay you to stock No-Leak-O at
once. Price 35c and up

Service Division—Oil Ring Department 376
THE PISTON RING COMPANY, MUSKEGON, MICH.

UNIVERSAL HOSE CLAMP



Adjustable. Two sizes will clamp any hose of any diameter. Made from cold rolled steel out of wire. No rough edges to cut hose. Put on in less than a minute. Everlastingly leak-proof. Order Universal Hose Clamps. Trademark on every clamp and carton. Get them from your jobber—or write us.

UNIVERSAL INDUSTRIAL CORP.

Hackensack, N. J.

Now offering both the matchless Peerless Eight and the Superb Peerless Six

DO MOTOR RE-CONDITIONING AND EARN BIG MONEY!

You can ream and hone an average cylinder bloc the factory way in fifty minutes. Do the work without removing the engine, quickly, efficiently and economically. All you need is

FOSTER-JOHNSON Re-Conditioning Equipment Cylinder and Piston Reamers, Hones, Kylin General Purpose Reamer Sharpeners, all included.

Write for Foster-Johnson Station Manual and Tool Catalog FOSTER-JOHNSON REAMER CO.

Eikhard

Elkhart, Ind.

SAMPLE FREE HEAT





Water Circulating Pump
For Ford Cars and Trucks
Is as reliable as the Ford Car Itself and assures a positive cooling system that constanting functions. No more overheating—No more freezing in travel—Made engineeringly corect of best materials—quickly and easily installed. Write for Dealer Discounts and complete information.

plete information.
WOOD-IMES MFG. CO., MINNEAPOLIS, MINN.
Formerly Mid-West Mfg. Co.



Nationally advertised. Univer-sally demanded. Order from Your Jobber.

No



ROBERT BOSCH MAGNETO CO., INC. Otto Heins, Pres., 109 West 64th St., New York



BRAKE LININGS and CLUTCH FACINGS

Always used where safety and service are the first and only consideration.

KELSO M'F'G CO.,

TRENTON, N. J.



The Kissel Dealer does not meet competition. He makes others meet it.

KISSEL MOTOR CAR CO., Hartford, Wis.



Dash Clock Value

The Minute Meter is biggest money's worth ever offered the trade. Fits any dash, wood or metal. Dust and vibration proof. Accurate. Guaranteed. Made by clock makers of forty years' experience. Take off to wind and set in a jiffy.

Radium Dial \$3.50. Canada prices add \$1.00. Fast, surefire seller. Best ever for the money—order now.

The LUX CLOCK MANUFACTURING Co. Inc.

Waterbury - Connecticut - U.S.A.

Don't Overstock!

The nearest Stewart Service Station carries a full line of sleward accessories and parts and can give you immediate delivery service. Don't load yourself up.



Real High Tension Ignition for Ford Cars

Varley coils eliminate nearly all chronic ignition trouble. Save gas. Add power. Keep plugs clean. Stop misfiring. Save repairs. \$2.50 each. Write for full particulars.

The Autocoil Co., Jersey City, N. J.

"It pays to buy a Kellogg'

ROCHESTER, NEW YORK





IT'S EASY TO SELL

"The only oil ring with a mileage guarantee"

"Sav-Oli" is stamped on bottom of every ring

The Sav-Oil Ring Mfg. Co. 1037 S. Figueroa St., Los Angeles

Buick Continues Hall Endorsement

After using Hall Hones for over one year Buick test out the New Hall Hone and approve of it. It is the only Hone endorsed by Buick.

THE HALL CYLINDER HONE CO. 435 Dorr St., Toledo, Ohio



ECLIPSE Safety SHADE

Instantly adjusted to any desired shading position with one hand from driver's seat. Makes night driving safe. One size for all cars. Write at once for our plan of distribution and full details.

SUBURBAN TRANSIT CO., Pla Subsidiary of Spicer Mfg. Co. Plainfield, N. J.



Lamps and Accessories

A quality group of fast selling items for every automotive requirement. Organized to supply the jobber and dealer exclusively.

THE CINCINNATI VICTOR CO.

714 Reading Road

Cincinnati, Ohio

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5,000 1209 the way at 3 Writ ELM 500,0

ADD Detr



Takes Off Wheel in a Jiffy C. & G. Wheel Puller

Wonderful time saver for the busy shop. Screw Puller on hub, apply pressure and off comes wheel. No stripping of threads. No straining of wheel or brake drum. Guaranteed. Sold on money refund basis. Order through your jobber or direct. Puller \$12.00—Adapters \$2.00 each. State which

The C. & G. Wheel Puller Co., Inc., Wellsville, N. Y.

Big money in this service

Dealers and shops make big money through the control of a franchise which entities them to the exclusive use of the patented "KLEAN RITE" system of washing and polishing automobiles.

This system has turned a job into an impressive, highly profitable business.

Write for full particulars.

Klean-Rite Auto Laundry Company 1710 East 75th St. Chicago, Ill.



The "Big Four" A complete car washing service. Used in connection with our Little Giant Water Savers, or can be applied to any ½ in, or ¾ in, valve. Rubber Nozzle—for full water flow. Spray Nozzle—for cutting mud from fenders, etc. Spout Nozzle—for cutting mud from fenders, etc. Slot Nozzle—a sheet of water covering a large surface with force.

PRICE—Set of four Nozzles, \$2.00 less dealers discount The Gaylord Manufacturing Company Paterson, N. J.



One of the fastest selling nationally advertised accessories on the mar-ket. Order from your jobber.

ADepartment that will Find What You Want

PARTS

HOUSE OF A MILLION **AUTO PARTS**

THE LARGEST STOCK OF NEW AND USED CAR AND TRUCK PARTS IN THE WORLD. WE HAVE EVERYTHING. New and Used Motors, Gears, Axles, Dearings, Springs, Magnetos, Generators, Clutches, Starters, Universal Joints, Radiators, Cushions, Wheels (Wood, Disk, Wire), Carburetors, Piston Rings and Pins, etc.

etc.
Always mention model and serial number
in order.

Write us. All inquiries answered promptly

DOUGLAS AUTO PARTS CO., INC. 2003-5-7-9 South State St. Chicago, Ill.

DOWMETAL PISTONS
Lighter, stronger, and longer wearing than aluminum
or Iron. Can be fitted with bronse bushings in the
wrist pin holes same as in iron pistona. Dowmetal
has no permanent growth. The expansion is little
more than iron.

SEND FOR PARTICULARS

LAMMERT & MANN CO.
Cylinder and Crankshaft Grinding
N. Wood St. CHICAGO Phone West 4918

ANY PART for ANY CAR NEW

or

USED

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Send for Catalogue

Cincinnati Auto Parts & Wrecking Co.

712-714 Walnut St. CINCINNATI, OHIO Parts our middle

AUTO PARTS

SAVES 50% TO 75% ON ALL CARS
New and Used Gears—Springs and Axles—Cylinda
Motors—Rear Systems, etc. Wire or Write

INDIANA AUTO PARTS CO. 818-18 NO. ILLINOIS ST. INDIANAPOLIS, IND. LARGEST CAR WRECKERS IN INDIANA

AUTO Save 50 - 90% PARTS

NEW AND USED GEARS, AXLES, BEARINGS, SPRINGS, MAGNETOS, GENERATORS, ETC. JOB-BERS IN BANKEUPT AUTO SUPPLIES.

BRIGHTMAN AUTO EXCHANGE HARTFORD, CONN.

5.000 automobile bearings, numbers 208 double row and 1200 single row in the original factory packing, 100 to the box. Fit 1920-21-22 Overland cars, Bethlehem, Brockway and Stewart trucks. List price \$4.22. Will close out at 35c each. Also 500 Champion spark plugs at 15c each. Write at once, UNITED HIDE, IRGN & METAL CO., ELMIRA. NEW YORK.

500,000 Perfection step cut Piston Rings, 7c each. List will be sent on request. ELYRIA BEL/FING & MACRINERY COMPANY, EXYTA, Ohlo.

ADDRESS: FORD RIDEASY, 228 Grand Ave., W., Detroit, Michigan. Absolutely kills the chatter shocks and luns out the rocking rebounds.

INFORMATION

Six cents a word is the rate for all undisplayed advertisements set solid, regular want ad style; all capitals, 9c. a word; all capitals leaded, 12c. a word; minimum charge \$1 an insertion; payable in advance (see next paragraph).

Ten per cent discount if one payment is made in advance for four or more consecutive inser-tions. Advertisements other than "Positions Wanted" will be billed monthly if run more than four times.

Add five words for address if replies are to come to a box number address at any of our offices. These replies are forwarded each day as received, in new envelopes, at no extra charge.

Refund will be made if all insertions ordered are not needed, the amount refunded being the difference between cost of insertions given and full amount paid.

Telephone orders must be confirmed in writing same day. No allowances can be made for errors of any kind unless prompt notification is sent us.

When replying to blind ads be careful to put on your envelope the correct box number and do not enclose original letters of recommendation— send copies.

Displayed advertisements are sold by the inch. Rates will be furnished upon application.

The right is reserved to refuse any advertisement and also to rewrite and edit copy furnished whenever the publishers consider it advisable to do

THE BROADCASTER DEPARTMENT

THE CLASS JOURNAL COMPANY

239 W. 39th St., New York 5 S. Wabash Ave., Chicago

PARTS

COLUMBIA, LIBERTY, STEPHENS, PREMIER and MITCHELL SERVICE and PARTS. DISCOUNT to the TRADE. MITCHELL COMPANY, 421 W. 55th ST., NEW YORK.

BUSINESS OPPORTUNITIES

FOR SALE—New Modern Garage and Auto Agency that can be bought right. Located in thrifty manufacturing town, on main state highway and Atlantic-Pacific Highway, This is investment for proper party. Write for particulars. Box 527, Lawrenceburg, Ind.

PLATING AND REFINISHING

NICKELPLATING

SILVER-GOLD-BRASS-COPPER AUTOPARTS REFINISHED

AUTOLAMP & REPAIR CO., 1249 Michigan Chicago.

SITUATIONS WANTED

POSITION WANTED—By mechanic. Experienced Ford mechanic. At present employed in Ford Service Station. Want steady employment. Middle West preferred. Have my own tools. Address Box 6193, care of Motor Age, 5 South Wabash Ave., Chicago, III. Experienced Ford

MISCELLANEOUS

DUESENBERG RACERS—Have two 16 valve, 4 cylinder 300 cubic inch dirt track, record racing cars for sale at right price. Also spare parts including cylinder block, crank case, crank shafts, rods, pistons, bearings, cages, valves, etc., to go with them. Address Box 6199, care Motor Age, 5 South Wabash Avenue, Chicago, Ill.

WANTED—Dodge overhead valve equipment, racing preferred. Give particulars. Sid Russell, Box 81, Shreveport, Louisiana.

PATENTS and PATENT ATTORNEYS

Attorney-at-Law and Solicitor of Patents

C. L. PARKER

Formerly Member Examining Corps, United States Patent Office

American and foreign Patents secured. Searches made to determine patentability and validity. Patent suits conducted. Pamphlet of instruction sent upon request. McGill Building, WASHINGTON, D. C.

DOKLET FREE HIGHEST REFERENCES
PROMPTNESS ASSURED BEST RESULTS
Send drawing or model for examination
and report as to patentability
WATSON E. COLEMAN, Patent Lawyer
644 G. Street, N. W., Washington, D. C.

PATENTS POURCE, Trade-marks and Copyrights Registeree

Prompt service. Highest references. Established 1864. Mile B. Stevens & Co. Registered Patent Attorneys. Offices 639 F. St., Washington, D. C. 10 Monadness. Block, Chicago. 341 Leader News Bidg., Cieveland, O.

PATENTS—Write for my free Guide Books, "How to Obtain a Patent" and "Invention and Industry" and "Record of Invention" blank before disclosing inventions. Send model or sketch of your invention for instructions. Promptness assured. No charge for above information. Clarence A. O'Brien, Registered Patent Lawyer, 232-B Security Bank Building, directly across street from Patent Office, Washington, D. C.

HELP WANTED

SALESMEN—We are preparing to market through the Jobber and Dealer two devices destined to become popular and prefitable sellers. Territories are now being allotted. Only experienced men of unquestionable standing considered. Write giving full particulars and territory preference. Hampton Automobile Products Co., Huntington,

SALESMEN—To sell well known high grade precision Ball Bearings as side line. An excellent opportunity with permanent lucrative connection is offered to the man who can show results. Address Box 6200, care Motor Age, 5 S. Wabash Ave., Chicago, Ill.

Some other reader wants to buy what you want to sell-let

Broadcaster Service

find him for you

If you have a want that anyone in the industry can satisfy —advertise it in the

BROADCASTER DEPARTMENT

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BALL BEARINGS



ROLLER BEARINGS

NORMA-HOFFMANN BEARINGS CORPORATION ANABLE AVE., LONG ISLAND CITY, N.Y.



Time Now to Order

Holiday Wrapped Lamps For Xmas Selling

From every point we receive rush orders for K-D Lamps in special holiday wrappings. As Xmas Gifts these lamps are unsurpassed for any motorist.
Get your share of the business—order your Xmas wrapped lamps NOW so we can ship at once.

DRUM TYPE SPOT LAMP

Specially designed, to harmonize with latest Head Lamps. Made in two finishes, ALL NICKEL or BLACK AND NICKEL.

Lamp is double shell construction, made entirely from BRASS, including bracket, therefore will not rust or corrode.

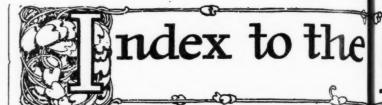
The bracket is made in two types, for either closed or open car, the open car type is of recent design and suitable for use on either a round or square windshield.

Cord, four feet long, furnished for attaching. Each lamp packed in individual carton,

THE K-D LAMP CO. CINCINNATI OHIO







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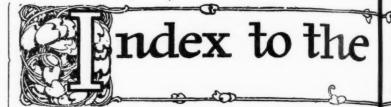
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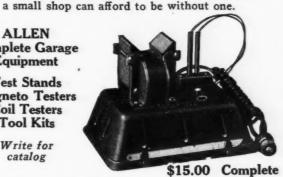
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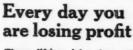
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